Congresses & Conventions
FONT

PROCEEDINGS

OF THE

International Fisheries Conference

HELD AT

DETROIT, MICHIGAN.

Tuesday and Wednesday. Dec. 20 and 21, 1892.

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Mr. Whitaker, of Detroit: I will call the meeting to order and state in a general way the origin of the International Fisheries Conference and its objects. Something like two years ago the parliament of the Province of Ontario, passed an act appointing a Game and Fish Commission, and empowering that commission to take testimony on the condition of the fisheries of the great lakes and the inland waters, and also the game of the province. They were also requested to confer with the states bordering on the great lakes respecting the fisheries and the enactment of uniform laws for the protection of commer- of the great lakes. The efforts of that board was g at New York. At the eting the Province of think the State of New perhaps some of the other eastern states, although I am not sure about that, were represented. Very little was done at that meeting, and it was finally adjourned to meet at Roch ester. There some discussion w had upon these matters, and certain t- tees were appointed, nd son tions were presented and sidere and their further dis ussi as pos poned to a meeting called in Hamilton, sometime about October of last year. At that meeting the subject was taken up and pretty fully discussed; and I think as a result of that meeting some recommendations were made to the parliament of the Provincial Government. Since that time, through the efforts of that Game and Fish Commission, some protective laws have been passed, and I believe they consider that there has been some benefit derived therefrom.

It was thought at that meeting that it would be beneficial to all of us who have an interest in these things to have an adjourned meeting, and keep up the organization, and upon my invitation that body adjourned to meet here some time in October of this year. But owing, as stated in the circular sent out, to the pendency of the presidential campaign, it was deemed best to postpone it until after the close of the campaign. We are to-day meeting for that adjourned conference. Considering the matter we thought it advisible to give a little broader scope to the proceedings of a conference of this kind than was originally contemplated. Those who are engaged in fish culture know that the decay of the fisheries has been constant and gradual,

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notwithstanding the states are engaged in artificial propagation, and doing their utmost to restock the great lakes as well as the inland waters. But really the matter in which the states are most interested, and the people, is the preservation of the commercial fisheries of the great lakes. It seems to me beyond all question that the lines along which we shall work must be the same; that our views should be uniform as to the necessity of imposing a reasonable regulation upon all fisheries, that will preserve for the future the benefits of the great lakes and their immense food producing product. It is to the interest of the people most decidedly, because here nature provides for us, without the culture of man, a constant and increasing, if properly preserved, food supply, and a very important one—a cheap food and a wholesome one. It is certainly in the interest of all classes that this business should be protected, and the thing we have to contend against as fish culturists is the fact that while we are annually putting into these waters, for the purpose of renewing them or sustaining them a large number of fish, and the governments have been liberal in this matter of propagation and distribution, we are confronted by the fact that thousands of tons of fish are annually taken by the fishermen that have never come to a mature or spawning age. This process of fishing is destroying not only our own work, but is destroying the fish that are naturally in the lakes which are taken before they have ever spawned. What we must all face is this question of how we shall perpetuate the fishing on the great lakes. Incidentally comes up the question of whether we shall have a close season that shall be uniform with Canada. Canada has a close season of the month of November, the month in which the spawning of salmonoids is principally performed. There is also the question of the regulation that should be laid upon fisherman in other other respects.

I will say that we have taken pains to invite here to consider these questions with us the commercial fishermen of the great lakes. They, I believe, understand that we as fish breeders are not attempting to interfere with their business, but that as people who represent the states, as people who are attempting to renew and build up the fisheries, we ask them to help us to impose some regulation that shall not take from the great lakes or smaller bodies of water these immature fish, and that have no commercial value. I think now, gentlemen, I have stated our objects broadly enough.

The presiding officer of this body at its last session was Senator McNaughton of New York. The Senator is not here, and I will take the liberty of inviting nominations for a chairman of this meeting. What is your pleasure, gentlemen?

Mr. Huntington: I nominate Mr. McDonald, the manager of the Buffalo Fish Company, as our chairman.

Mr. McDonald: I had rather be excused. I would prefer to have some of the older members have that honor.

Mr. Post: I nominate Mr. Bowman of New York.

Mr. Bowman: I prefer not to act as chairman of the meeting; I was not present at any of the former meetings. As Mr. Whitaker has stated the objects of the meeting and is perfectly familiar with the subjects that will be under discussion, I think he is the proper man to act as chairman, and I will move to amend the motion, and will nominate Mr. Whitaker as chairman [illegible] conference.

Mr. Whitaker: Gentl[illegible] much prefer that you [illegible] else.

Mr. Bowman: I will [illegible]

Mr. Whitaker was unanim[illegible] ed as presiding officer of the conference.

Mr. Whitaker: Gentlemen, I thank you for designating me as chairman of this meeting, at the same time I should have very much preferred to have been on the floor to discuss these matters with you.

Mr. Bowman: We want you to discuss

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these matters, and you can call some one else to the chair, and take the floor, any time.

Mr. Post: I nominate Mr. Amsden as secretary of this meeting.

Chairman Whitaker: It is in order to nominate a secretary, and Mr. Amsden of Rochester, has been so nominated. Are there any further nominations?

A vote was taken and Mr. Amsden was unanimously chosen as secretary.

Chairman Whitaker: I have a letter from Mr. Booth, of the A. Booth Packing Company, of Chicago, one of the largest dealers in our lake fish there is on the borders of the lakes. He says:

CHICAGO, Dec. 17th, 1892.

Herschel Whitaker, Esq., Detroit, Mich.:

DEAR SIR—I am very sorry to say that I am called away to New Orleans and shall not return in time for your meeting at Detroit, but I sincerely trust you will have sufficient people to attend the International Fish Conference and that their deliberations may result in the general good of protection of fish and fish culture, the enforcement of laws and the passage of others that may be beneficial. There seems to be generally throughout the states good laws for the protection of fish and game, but unfortunately there seems to be more "honor in the breach than in the enforcement." We have called the attention of some fish commissioners to the small meshes of pound nets and gill nets, which I think do more to destroy the fishing interests of the lakes than anything else, and I do hope we may profit by the better observance of the laws in reference to the protection of fish and game enacted in Canada, or rather the enforcement of it. I should very much like to see a more cordial feeling existing between our country and Canada in reference to uniformity of the fish laws, and trust at your deliberations much good may result, and am

Very sincerely yours,

A. BOOTH,

President A. Booth Packing Co.

Chairman Whitaker: For the purpose of securing the names of those present, so that they may appear in the record, the Secretary will now hand you a paper on which you will please write your names.

The following gentlemen were found to be present:

C. V. Osborn, Dayton, O., Fish Commissioner.

L. D. Huntington, New York, Fish Commissioner.

Wm. H. Bowman, New York, Fish Commissioner.

Samuel Wilmot, Ottawa, Canada, Superintendent of Fish Culture of the Department of Marine and Fisheries of Canada.

Edward Harris, Toronto, Ont.

Thomas Marks, Port Arthur, Ont.

E. W. Gould, Searsport, Me., Commissioner of Sea and Shore Fisheries of Maine.

W. P. Andrus, Minneapolis, Minn.

Dr. Robert Ormsby Sweeny, Sr., Duluth, Minn., president Minnesota Game and Fish Commission.

Herschel Whitaker, Detroit, Michigan Fish Commission.

J. C. Parker, Grand Rapids, Michigan Fish Commissioner.

Hoyt Post, Detroit, Michigan Fish Commissioner.

W. B. Wells, Chatham, Ontario Fish and Game Commissioner.

Charles S. Hampton, Petoskey, Michigan Fish and Game Warden.

Frank N. Clark, Northville, Mich., United States Fish Commission.

Frank J. Amsden, Rochester, N. Y., Cheaper Food Fish Association.

C. M. Keyes, Sandusky, Ohio.

John J. Speed, Detroit.

Hon. W. W. Griffin, Detroit.

Wm. Dupont, Detroit.

A. G. McDonald, Detroit, manager Buffalo Fish Co.

John Zimmerman, Detroit.

Hon. Otto H. Rusch, Detroit.

C. H. Moore, Detroit.

Hon. George C. Green, Detroit.

Wm. Craig, Detroit.

A. Solomon, Detroit.

James Craig, Detroit.

Hon. L. C. Hough.

Hon. S. R. Kingsley.

Chairman Whitaker: I am in receipt of a large number of letters, a few of which I will take occasion to read to you.

Letters were then read from Mr. Emory D. Potter, of Toledo, O., and others.

Mr. Green: I have a letter here in answer to one I wrote, from an old fish-

erman of thirty years' experience. I would like to have the letter read to the conference.

Mr. Whitaker: No doubt the conference would be glad to hear it. The Secretary will please read it.

The Secretary read the letter of Mr. Levi Brown, of Sand Beach, as follows:

SAND BEACH, Mich, Dec. 19, 1892.

Mr. Green:

DEAR SIR—In reply to your letter will say I am glad to hear from you. I will give you my ideas of fishing and what ought to be done in the future to protect the hatcheries and fish. I have fished about thirty years now, and you know that I have always made a success of it. The hatcheries are a great help toward increasing the fish, but unless something is done to protect the small whitefish we have for a number of years planted - a number of millions each year —we shall fail. We find that these fish are caught when only from one to two pounds in weight, as you know, and they are only half grown. For one place they are destroyed in Saginaw Bay by the tons and in other places the same. We understand that the small mesh has been a failure in the way of protecting the small whitefish. I think the best way is to put a fine on the man who catches them, also on the consumer, or who ever has them on hand—anything under one and a half pounds.

You know these small fish when caught could be thrown back into the water and would live. Fish of that small size are of no use to anybody. There should be a fine of $100 to $500 for any man who is caught with them. Unless this is done the fish are not protected much.

I think the fish ought to have a rest the same as the game, to give them a chance to gather on their feeding grounds. Now there are fishing tugs that fish the year round unless it is a very hard winter. I am not talking altogether about others, as I fish with a tug and sail boats myself. I can make a success of it if I have five or six months out of the year, and others should be satisfied. I think in the spring, from April 1st to July 1st, and in the fall, from Sept. 14th to Dec. 1st, should be a close season. This gives us three months in the spring and three months in the fall to fish. That is six months to fish, and that ought to satisfy the fisherman. Some may think the Canada fishermen will have a better chance, but I think not, for as they hunt them up they would crowd on this side. The fish work the same as the game. Some fishermen may think this would be a damage to them, but the price of the fish would come up so I think it would be a benefit to all the fishermen. Mr. Green, I give you the best of my ideas, and perhaps you can better them in some places, but I hope this will give satisfaction to all. Don't forget to let me know how you prosper with this.

Yours respectfully,

LEVI BROWN.

Chairman: Gentlemen, we have prepared a program of the subjects which should be discussed by this conference, which is as follows:

THE NECESSITY FOR AN EFFICIENT ENFORCEMENT OF LAWS BY A PAID FISH AND GAME DEPARTMENT.

I.

1. Should the Department be under the Fish Commission?
2. Number of Deputy Wardens.
3. Compensation of Chief Warden and Deputies.
4. Terms of office.

II.

1. Should there be a close season for whitefish?
2. If yes, what shall be the limit?
3. Shall a restriction be put upon the size of fish to be taken or had in posssession or on the size of mesh?
4. Penalties.

III.

Close seasons for brook trout, grayling, California trout, brown trout, Loch Leven trout, Land Locked salmon and small mouthed bass.

1. What should be the uniform close season for brook trout, California trout, brown trout, Loch Leven trout and Land Locked salmons.
2. Black bass.

IV.

GAME—Close seasons, etc.

Chairman Whitaker: In some respects, gentlemen, the first subject for our discussion and consideration in my opinion is one of the most important we have for consideration here. What we need to do is to agree upon a uniform fish and game warden law. And it should not be a fish and game warden law that simply provides places for men who do not perform the functions of their ~~duties~~ office. Unfortunately for the State of Michigan, and I know that is largely so in the State of Ohio (I think their law is very much the same as ours), our law calls for the appointment of a chief

warden whose compensation is $1,200 a year, and is paid by the state. It permits the appointment of not more than three deputy wardens in each county by the chief warden, and their compensation is fixed by the Board of Supervisors. The result has been that we have absolutely no enforcement of the law, because the supervisors will fix no compensation, and therefore the wardens are simply figure heads. What the state should do, in my opinion, is to pass a law which should make these wardens paid by the state—should pay their expenses by a warrant drawn on the State Treasurer, and countersigned by the Game Warden-in-Chief. I may have something further to say upon it, but it seems to me this evil may be remedied in that way.

The subject is now open for your discussion. In the first place I think this subject ought to be anticipated by the discussion of the question, should we agree upon a uniform warden law? I will take the liberty of calling upon one or two gentlemen whom I know are familiar with the enforcement of the laws in their localities. I will ask Mr. Wilmot to give us the workings of the warden law, so far as he is informed in his jurisdiction, and to talk upon the matter before us as in his judgment he should.

Mr. Wilmot: Mr. Chairman and Gentlemen—I feel a good deal of deference in appearing before you. In the first place, we do not come here to represent the Province of Ontario or any of the provinces of Canada. We come here on behalf of the Dominion Government, to listen to what may he said, with a view, if possible, to learn something and to give as much information as we can, but over this question of wardenship we have no jurisdiction whatever. The Dominion of Canada has had laws controlling these matters since the federation, but at present there is a dispute arising between the local governments of the provinces and the dominion on that question. In the meantime, the Federal Government is making what are termed the fisheries laws. They have for several years appointed what are termed the fisheries officers. The Dominion Government has nothing whatever to do with the game laws. They are wholly under the jurisdiction of the ~~fisheries~~ Provinces. The local governments of Canada have control of the game laws. Therefore, the proceedings we are entering upon are quite beyond my jurisdiction to give you any light upon. If the question comes up with regard to the appointment of the fisheries officers I will be glad to give you what information I can. But it is beyond my power to give you any knowledge upon this subject of game wardens, because we have nothing to do with it. If we have any representative here from Ontario, perhaps he can do so In the mean time, I must decline to discuss that subject.

I might also state, while I am on my feet, that I notice the meeting has been called the International Fisheries Conference. At first I was under the impression that it wasn't my sphere to be here at all, because it is not our province to deal with international questions. International questions can be dealt with only by the federal officers of the United States on the one hand, and Great Britain on the other. This could hardly be called an international meeting. With all due deference to the International Fisheries Conference, I think it more appropriate to call it an Inter-state State Fisheries Commission, in which the states proper would have an opportunity of expressing themselves, but international action, I think, is beyond the jurisdiction of any of us. We in Canada have to leave all those questions to a higher power—Great Britain. The Province of Ontario had given information to you previously that they were desirous of having a meeting of this description. The Province of Ontario never communicated that wish to the Dominion Government. We never had any knowledge of it. Consequently the Dominion Government had no communication, and received no invitation from the previous meetings you held, which

I deemed of great importance. The reason why we are here is this: The Dominion Government appointed a special commission, consisting of myself and my colleagues, Mr. Harris, of Toronto, and Mr. Marks, of Port Arthur, to investigate matters in the Province of Ontario with a view of ascertaining what could be done to improve the fisheries and if possible to do away with the cause of the complaints and clamors that now exist among the fishermen in their work. They were all complaining of the scarcity of fish. They were all complaining of improper close seasons. And that special commission has been engaged during the last few weeks in taking evidence around Lakes Erie, Huron, the Georgian Bay, and a portion of Lake Ontario. While away from home I received your kind invitation to attend the meeting, but could not accept it at the time, because our duties did not extend sufficiently far to enable us to attend meetings of this kind. I therefore telegraphed to our Minister of Marine and Fisheries asking whether we would be permitted to come here and listen to what might be said, with a view of being benefited by any expressions that come forth here. His consent was given; he telegraphed, "By all means attend the meeting," and hence we are here. When you get down to the question of fisheries I will be glad to discuss that, but it would be out of place to say any more.

Chairman Whitaker: I will say to the representatives from the Dominion Government that we are exceedingly glad to have them here, and we hope they will participate in every subject that may come up for discussion. This child, the International Fisheries Conference, was baptised without my consent. I did not know what its name was until long after the act was performed. It makes but very little difference, however, what its name may be, the proceedings that have been had at these meetings have been in the nature of a conference of states and provinces, or whatever you may be pleased to call them, of different nations, and it has all been tending toward the general good of all in that line. We ask every person who is interested in these questions to be present with us at our meetings and express their sentiments freely. It binds no one, but if by these conferences good can be brought forth, the states and the provinces are so much benefited.

I am aware of the fact that the State of New York has one of the most efficient fish and game warden systems of any of the states. We would be very glad to hear from any of the members of the New York commission upon that matter. The question before us is: The necessity for an efficient enforcement of laws by a paid Fish and Game Department. 1. Should the department be under the Fish Commission? 2. The number of deputy wardens. 3. Compensation of Chief Warden and deputies. 4. Terms of office.

I will call upon Mr. Huntington to explain the working of the New York law.

Mr. Huntington: To this question that you propose to discuss: Should the department be under the Fish Commission? I should unhesitatingly say, Yes. Our Chairman here has the law of the State of New York with him, and it has been but slightly changed in relation to the fish and game protectors from the law that has existed for some few years, but under the provisions of the Codification Bill we revised our entire game laws of the State of New York at the last session of the legislature, and enlarged the powers of the commissioners. Under that law, which has been in existence since May last, the old system was improved wherever it was found to be defective, and the new system has been found to be very effective.

I would briefly state the workings of our law thus: The foundation of it is this: The appointment of the fish and game protectors, as they are termed, is left with the commissioners of fisheries. Within our state there are twenty wardens, and I would state that their terms of office are subject to the control of the

commissioners; that they appoint or they remove for cause. We have under this system a chief game protector, and the other game protectors are directly under him. When any cases of serious complaint arise we investigate them and refer them to the chief warden or game protector, and he makes a thorough investigation and reports, and then we take the matter in hand, and if we have any reason to believe he has been derelict in his duties, we dismiss him and endeavor to get a better man in his place.

The state is divided off into districts as compact and as easy of access as possible. There are nineteen of these departments or districts, and to each one of them is assigned a protector, and his duties are to carry out the game laws in that district. It makes larger districts even after dividing the territory of the State of New York off into nineteen spaces than is convenient, but it is the best we can do. The Chief Protector visits them and takes general control over them, and wherever he has any reason to believe that further vigilance is required, or if there is any violation of the game laws going on in any particular district, he takes the matter in hand and he may call any one of the protectors from one district to another to prevent the violation of the laws. The pay of the game warden or game protector is $1,000 a year, and he has his traveling expenses paid. His traveling expenses amount to but very little, for there is no railroad in the State of New York but what cheerfully gives him passes. I have no doubt he has passes to-day in his pocket over every railroad in the State of New York. The nineteen general game protectors receive a compensation of $500 a year, and traveling expenses, and when convictions are made and penalties are inflicted and collected, the expenses of the court are deducted from that, and a moiety that is so collected goes eventually into the hands of the fisheries commission, and from there, upon properly endorsed papers by the Chief Protector, the protector who makes the arrest and causes the conviction receives the moiety, the balance of the penalty so collected is a reserve fund for purposes of employing, where necessary, counsel for protection.

That, gentlemen, is the system of protection that exists in the State of New York. The commissioners have every reason to believe that it will be, and is in fact to-day, a very efficient system. We have reports from every direction in our state, and when we hear an inspector is not doing his duty we investigate the reports, and sometimes we find there is some reason in it, but too frequently we find there is some malice, or some other motive than a proper one which has actuated the complaint. Perhaps it is the very efficiency of the protector himself that leads to the complaint against him. We find the warden law efficient; we find the administration of it to-day, with perhaps few exceptions, very satisfactory, although I say, in my capacity as a commissioner, that under the large powers, under the increased number of game protectors, and under the new code, which is plain, clear and concise, particularly as to the game laws, it requires some little modification, more particularly in phraseology. The bill was two years in getting through the legislature. Many of the members or their immediate friends wished to get their little special matters for their locality through, and the bill has been amended so much that its symmetry has been somewhat destroyed and interfered with, but that can be easily rectified. We have every reason to believe that the working of the present system, with some slight modifications where there is vagueness in the construction of the law, will be attended to this winter, and we will have a system of protection within the State of New York that is good and efficient. I am a great believer in the idea that the game wardens should be directly under the control of the fish commissioners. I do not see how it can be efficient in any other way.

Mr. Osborn: What becomes of the other half of the moiety you spoke of?

Mr. Huntington: It is left in the hands of the commissioners as a special fund for the purpose of employing counsel in important cases.

Mr. Osborn: It is absolutely under the control of the commissioners?

Mr. Huntington: Yes, sir. We have two or three important cases now, and we have to use that money in that way.

The Chairman: The matter is now open for discussion, and we hope all will participate in it, confining themselves to the question: "The Necessity for an Efficient Enforcement of Laws by a paid Fish and Game Department." Mr. Bowman, how does the moiety system operate in New York? Will you state whether prosecutions have been made, and with what result, and whether, so far as the seizure of nets is concerned, the law has been enforced?

Mr. Bowman: So far as that is concerned I will say that our wardens were first appointed by the Governor. He had the appointment of the different wardens, and it was more or less political at that time. Subsequently the appointment of the wardens was given to the Fish Commission, and they were increased to twenty, as has been stated. The state was subdivided by the Chief Protector, each having control of his own district, and the chief having the right, where one was too well acquainted, to import to another district one or two, and make a raid here and there. In almost every district throughout the state we have reports every month, at our meetings, from each game protector. They report the number of nets seized, the number of actions commenced, and the amount of work generally done by them. And in almost every one of these reports you will find seizure of nets of fykes, gill nets and set lines, by every protector throughout the state. They are taken before a magistrate and destroyed. He destroys them. So there is no question about that. At first we had some difficulty in procurfng convictions. Actions would be commenced before a justice and he would call a jury in that locality that would invariably sympathize with the fishermen, and verdicts were rendered by these juries without any regard to evidence whatever. But latterly I think we have been gaining, and the opinion is growing throughout the entire state that it is absolutely necessary to enforce the game laws and protect not only the fish but the game of our state to prevent it from being entirely destroyed.

The Adirondack regions are being formed into a park. Our state has taken hold of it, and it is built up now with cottages, almost everywhere wherever there is a valuable site. All through the Adirondacks you will find cottages where some gentleman takes his family to spend the summer. I can state from observation that the deer of that locality have doubled within the last five years under this protective system, and I am very glad to say that the guides of that region have become protectors with us. They believe in it. The express companies have been sued by us for transporting game, and we are, we think, enforcing the game laws by looking as well after the express companies as the poachers. The poachers wont kill the game unless they can sell it. If we can prohibit the transportation and prohibit the sale in the markets we take away the inducement to the poacher to kill the game, and one poacher who is acquainted with the country will kill more deer in one day than a hundred sportsmen that come from New York. The deer laugh at the sportsman. They are not afraid of the New York sportsman at all, but when a man has been brought up in that country, and knows the habits of the deer, he always comes home with venison. He knows where they are, and one such man destroys more deer, as I say, than a hundred sportsmen. But if he knows he can't sell them, he won't destroy them. They occasionally shoot one for food. In that way we have prevented a large number of deer from being taken out of the forest. And it is the same with trout.

The trout about the Fulton chain of lakes where we have been stocking for the last ten years, more than any other place in the Adirondack region, have doubled within the last five years. The close season is observed. They are protected. They are watched closely. We do not allow them to fish until the season opens on the 15th of April. The close season is respected, and we are doing through the protectors an admirable work in the State of New York. My own judgment is that you may turn loose as many fish as you please in Lake Erie or Lake Ontario, and through the different lakes of the states, and if you allow poachers to go along and take them out, without fear of prosecution or arrest and penalty, it is entirely useless to propagate and distribute. They can take out in one week more fish than we can put in in a year. They even have gone so far in our state as to use dynamite and other explosives. They use nets. I have seen a net with first a large mesh, and about a foot from it a mesh of one and a half inches, and then a foot from that a mesh of an inch, and they stretch that across the water and they take out everything. The first mesh took out the large fish, the next a smaller, and the next a still smaller fish. Nets of that kind will take out all the fish in a stream.

Our warden law has worked very satisfactorily with us, and I say it has not only protected the game and the fish, but it has also educated the people. We have a far better feeling among the people, among the farmers, among the guides of the Adirondacks, and among all the fishermen of the state in favor of protection than we had a few years ago. I think that perhaps is the best bulwark we can have. If we can educate the people and get an intelligent public feeling on this subject, we have a way in which our fish and game will be protected in the future. The only way to have any game or fish in the future is to preserve and protect it now, and we will have very little trouble in the future. I think public opinion is growing very rapidly in our favor, and in a few years you will find game clubs in every county. There are many game clubs in our state now, and they are educating public opinion up to that point where I think we will have far better fishing and shooting than we have had for years before.

Mr. Huntington: Allow me to supplement my remarks by calling attention to one point. We have under the codified bill which has been in force since the fifth day of May last, one section that is the best section we have in the bill, and that makes this provision, which I look upon as an admirable thing in the bill for the protection of our game and fish. It is a section which gives the commissioner the power, on the application of the Board of Supervisors, or of any incorporated association for the protection of game and fish, to appoint as sub-deputies such persons whose names are submitted to them, who are clothed with the full power of the game protectors. These men receive no pay or compensation from the state, with the exception of the moiety in case of conviction. We have within our state a large number and rapidly increasing number of societies or incorporated organizations, fishing clubs and hunting clubs, and so on, and by incorporating them under the state law, which is very little trouble or expense, these clubs employ some good and worthy men, they have them in their employ, and they pay them, but those men can protect their property. Those men are employed and paid by the club, good, faithful men, and they think a good deal of them, and they are ready and willing to render any assistance, but they were powerless, they had no power of arrest. Now, by the making of an application, and sending the name or names in to the commissioners, the commissioners have the power to appoint them, and give them their certificate, and they become virtually a portion of the regular force of the protectors of the state. Of course those men are already

employed by the club, and they are only too glad to have them qualified with authority to make arrests, and they make arrests and may follow offenders anywhere in the state, and in case of conviction the law applies in the matter of moiety the same as to the regular force. They receive one-half of the moiety that is paid to the commissioners, and that is the only compensation they get, consequently they are not one cent expense to the state. Now, since the first of May last, when this became a law, we have had applications and have appointed over forty of such inspectors, and I believe in less than a year we shall have fifty if not a hundred of such good, efficient men. I think that is one of the best provisions of the law in our state.

Mr. Osborn: There is no limit to the number you can appoint?

Mr. Huntington: No, sir. It rests entirely with the Commission. I will state that the Webb Company in their preserve, have appointed six men, and they are efficient men, and those men are obliged to report, under the system, as are the regular inspectors. And those men are not costing the state one cent. The South Side Club have four.

Mr. Osborn: Can they be sent out of their districts the same as the regular protectors?

Mr. Huntington: They never do send them out, but they have the right to send them out.

Mr. Osborn: Provided they want to go?

Mr. Huntington: Yes, and they are required to make monthly reports to the Chief Game Protector. We get the reports of all the game protectors, and from the reports we see the record of the men, and we know whether they are performing their duty or not. It helps us materially.

The Chairman: The question is still before the conference, and is open for discussion; the desirability of a uniform system of game wardens.

Mr. Post: In order to bring the matter before the meeting, I offer this resolution:

Resolved, That it is the sense of this conference that the necessity exists for an efficient and uniform enforcement of protective laws by a paid fish and game department on the general basis of the New York law.

The resolution was duly seconded, and declared open for discussion.

Dr. Sweeny, of Minnesota: I would like to recite our experience and what we have tried to do in regard to this matter. Up to two years ago, in the State of Minnesota, we had a fish commission whose duties were simply to propagate and distribute fish. We had no special jurisdiction over the game or the fish. The general law was that every sheriff and police officer was a game warden. The consequence was they industriously let it alone. Two years ago the Fish Commission was reorganized into what is designated as the Game and Fish Commission, and they had authority to appoint a game warden and four deputies, and when we came to look at the matter the amount of money at our disposal was so limited (we had but $10,000) to propogate and distribute fish, and to watch the game, that we found it utterly impossible so to do. We appointed a game warden who had jurisdiction over the whole state. Under our law we have authority to appoint special wardens, in any and every county, and special wardens for any county, so that he can follow a law breaker and poacher from one county to another, but by some oversight in the law he has no authority to arrest any more than any other citizen. And we have found many defects in that way that are brought out out in the case of an attempted conviction. We are working under that law, and have been by appointing special deputy wardens in the counties, and in some counties we have four or five or six. And in other localities there is one deputy warden that has to look after two or three counties. We found that our money would not allow us to pay salaries to these special wardens. We pay their actual expenses that they have borne on itemized vouchers, and

we allow them two dollars a day for the time actually employed in following or arresting, and in any case of conviction we give them a reward of $25. We find in this as in any other employment that some are good for nothing, utterly inefficient, while others are efficient and do good work. They have turned in thousands of yards of nets to us, and set lines, and every conceivable trap for killing fish.

These wardens are appointed on the recommendation of the citizens of the state, some on the recommendation of game clubs, and they are removable for cause. If they are efficient they hold their office for two years. In case of conviction and fine, the fines are turned into the State Treasury to the credit of the Game and Fish Commission. We find in our attempts to regulate the depredations that the greatest obstacle to the enforcement of the laws are the petty officers, county officers, justices of the peace. Some of them have instantly decided the law unconstitutional, and dismissed the charge. Others dismiss them with a fine of a dollar or fifty cents. In one instance where I had at least ten men taken before a justice of the peace for shooting moose, then prohibited for a period of ten years, our warden was admonished he ought to be in better business, and to let these fellows go, there was plenty of game. I am sorry to say that in most instances the violators of the law are frequently encouraged by the game people. They furnish them with nets and suggest to them where there is good fishing, and say to them, we do not know where you are going to fish, but we buy all the fish and game you can furnish. They are shipping mutton (?) done up in sacks that has been killed since the first of this month. We have found out in trying to prosecute these depredators that our law is woefully inefficient, so much so that we have determined to modify and rearrange, and strengthen the law in every possible way.

I am very sorry that our treasurer, Mr. Andrus, is not here. He was to be here. He was the chairman of the committee on the revision of the laws, and he could give you some information. We had recently a convention in Minneapolis with representatives from Dakota, Wisconsin, Iowa and other states, and we had hoped to have Michigan there also. We have drawn very largely on the New York game laws, and the laws or resolutions that we presented to the meeting seemed to be acceptable to all, and the result was they appointed a committee of strong men to see the members of the Legislature and urge the adoption of these laws. There will be slight modifications to suit the different states, but there is a feeling and disposition to have a uniformity in the game law so that a man can't shoot in Wisconsin and run over in Minnesota and escape their wardens. The laws will be made unform, and the depredators will not so easily escape. That very same resolution is being printed and is being sent to the different states, and I think all you gentlemen will be able to see what the proposed action will be. Mr. Andrus may possibly be here to-morrow. I hope he will. He had some business on hand that detained him; if he arrives here with some of those copies, you will see what we propose.

Mr. Whitaker: What is the compensation of your warden?

Mr. Sweeny: He is paid $1,500 a year.

Chairman Whitaker: How are the deputies paid?

Mr. Sweeny: They are paid their actual expenses, two dollars a day, while they are in actual service, and if they make a conviction we give them $25 for each conviction, and two dollars a day in addition for their services. That is for their time, and their statement of expenditures must be itemized and sworn to. We have found that to be a very good plan.

Chairman Whitaker: The subject is still open for discussion. We would like to hear from the Sea and Shore Fisheries Commissioner of Maine, Dr. Gould.

Dr. Gould: I did not come here with the idea of saying anything, but rather as a listener, but I will say this: The warden system of Maine differs from all the other states. We have a good many wardens there, and the way they are appointed is this: In the first place they are recommended by two-thirds or rather a majority of the Board of Fish Commissioners, and their names are presented to the Governor and he makes the appointment, and the nomination has to be confirmed by the Council. We pay them two dollars a day and their expenses, they being required to render an account at the close of each quarter. The account must be itemized and approved by the Commissioner and sent by him to the Secretary of State to be approved by him. They are required to send a daily report to the Commissioner of the work done each day, and it is placed on file. At the close of each quarter they are required to send in another report of the number of cases that have been tried in the current quarter. The moiety system was in vogue in Maine several years ago, and that was all the remuneration the warden had, but we found that had a bad effect, for the reason that it gave rise to a cry of blood money by the poachers, and they imposed on the public so, it fell into disrepute, and at the last Legislature the moiety system was done away with, and the salary was put at two dollars a day and expenses.

The Chairman: Is that paid through the State Treasury?

Dr. Gould: That is paid through the State Treasurer, and the fines that accrue from convictions are paid to the County Treasurer, and by the County Treasurer to the State Treasurer, and there it is credited to the proper department under which it occurs. We have two commissioners, one of fish and one of game, and they are kept separate. The doing away with the moiety system on account of the cry of blood money has, I think, raised the standard of our work, so much so that during the past two years we have had a great improvement in the sentiment towards the protection of game and fish. Of course we have a great many wardens that are entirely useless.

We have about 200 wardens in the State of Maine, and all of them are under the control of the commissioners. The term of office of the warden is three years, unless removed by the Governor. There is also one section that constitutes every sheriff or police officer or constable a warden with full powers in their particular town or county, and they receive the same fees as the regular wardens. As a whole we have some very efficient wardens, but it is a slack system, I think, in that direction, and we propose to remedy it at the next legislature.

Mr. Osborn: I would like to ask the New York Commissioner if their district wardens are required to devote their entire time to the duties of their office?

Mr. Bowman: Yes, sir, we require them to devote their entire time to their duties.

Chairman Whitaker: I am sure the Conference would like to hear from the Ohio representative, Mr. Osborn, in reference to the desirability of a uniform system of enforcement of laws.

Mr. Osborn: Ohio has nothing to boast of in the way of a warden system at all. We have a paid state warden; we have county wardens appointed usually upon his recommendation. The state warden receives $1,200 per annum and all traveling expenses. The railroads are not as liberal with us as they are in the State of New York; we have to pay full fare.

We have two points in our laws that I think are very desirable. We have the choice of justices in the county in which the action is brought. The officer making the arrest can carry his arrested person before any magistrate in the county, and if he is careful, he knows where he is apt to have justice done, the best show for his side, and our law gives to the justices final jurisdiction. You cannot go beyond the justice court except on error. That saves us largely in the expense of litigation, and the rich

violators are unable to make use of their money in carrying the cases out of the reach of the funds in the hands of the commission.

I agree with all the rest of you as to the answers to these questions. We have had two systems. We had one warden appointed by the Governor, and the warden was of no value whatever. As New York has done so we should, as to the number of deputy wardens. I think our plan is a very lame one of putting a deputy in each county. The commission in our state has transgressed the law some in consolidating different counties in one district. When we found a good warden we put several counties adjoining him under his care. We haven't had the matter called in question, but it is not in accordance with the law. The compensation in New York is very cheap. It is getting it done much cheaper than we are getting the same work done. I think their system, as far as it has been set forth here this morning, the best we have in the states. I would be very glad to have Mr. Wilmot enlighten us in regard to the warden system in the Dominion.

Mr. Wilmot: In regard to the protection of fish in Canada it is as follows: The Dominion Government appointed for each of the provinces an inspector of fisheries at a liberal salary, whose duty it is to see that the laws in connection with the fisheries in that province is carried out. They also appoint numerous overseers or wardens in different localities, all under the supervision of this inspector. Any violations of the law are supposed to be noticed by these overseers or wardens. They are allowed a small compensation per annum, some larger, some smaller, in accordance with the particular locality and in accordance with their duties. Over and above that they are entitled to receive traveling expenses to and from the places where they are required to go to see into these violations. These fisheries wardens are appointed during pleasure. The fisheries inspector also is appointed during pleasure. At the end of the year the fisheries warden make a report to the inspector of fisheries for the province. That inspector in turn sends in these reports, together with his own, to the Dominion Government. That report is generally published. Of course this is a system which, to a certain extent, is acting pretty well, but the great difficulty lies in the small salaries that are paid to these wardens for their duties. The consequence has been in many cases that they prefer to accord with the views of the poacher than to carry out the requirements of the law. The locations in which the fisheries are carried on are liable to change politically every ~~two~~ years.

We find that in the extensive areas in which the overseers have their jurisdiction they cannot do their work properly, and I think it is in contemplation to divide them in districts or sections, and appoint one efficient man, paying him handsomely, he remaining there at pleasure, giving him jurisdiction of that whole section, and having the authority to call to his aid anybody to assist him in carrying out the law. But it is necessary to have one first-class efficient man at the head of such an arrangement, that he may consider that his living, his occupation, and he must attend to it, and can call upon others to assist him at any time. That I think would be a good system, perhaps better than any other that I have heard yet. But that, however, is an idea of mine, and it is framed upon an experience of some forty or fifty years in connection with the fisheries. The only way to make a man efficient is to give him a handsome salary, and say, there are your duties and you are responsible for the work. And if a man feels it is his living, and that if he don't carry out his duties efficiently he will lose the office. I think he would be more careful in carrying them out. The plan followed by the State of New York is very good, but it is subject to so many changes that I should doubt its efficacy. But your laws are so different from ours that perhaps you could not carry out the system

that I have been attempting to describe to you.

Mr. Bowman: I would say that so far as the State of New York is concerned it has never been considered a poltical office or appointment, and politics have so far entered very little into the workings of the Commission. The commissioners serve without salary, and it is not a position that is particularly sought after by politicians, and consequently, there has been very little politics thought of by them. Whenever a man is appointed by us, if we find him efficient we leave him there as long as he is efficient. I know a protector in my own district that has been one for fifteen years. No one has thought of changing him. As soon as we find one that is inefficient we remove him and appoint another in his place. They are removed at the pleasure of the Commission. If we find a man is not looking after his duties we have no hesitation in removing him, and putting another man in his place. That has been our usual custom, and I think will continue to be in the New York Commission as long as it remains satisfactory.

Last winter there was an effort made during the session of the Legislature to give the commissioners a salary, but the commissioners opposed it. As long as we were there we didn't want any salary for the simple reason that the moment you attach a salary to it, it becomes a political office, and it would change with every change of administration and it would entirely destroy the efficiency of the Commission.

One word in relation to the moiety system. We have the moiety system in our state, and we think it works admirably. There has been a prejudice against it, it is true. The business of the Chief Game Protector is not simply to collect fines, simply to sue a man and put the money in his pocket, it is more to enforce the law, and give men to understand they must obey. When a man has innocently transgressed the law he is frequently settled with for the simple costs of prosecution that have already been made. But where we find a persistent poacher, a man who is determined to poach at all hazards, that man we follow, if we have to follow him to the United States Supreme Court. We do not stop anywhere. We had a few such cases at the lower end of Lake Ontario. Nets were seized, and he replevined them, and brought action against Mr. Sherman, when he was commissioner, and that was carried to the Court of Appeals and was finally decided in our favor. Those are are the men we look after more than any others. Some men may do something that is technically a violation only, and those violations we instruct the protectors to pay no attention to. We are looking toward creating a public opinion in favor of the law rather than to get fines. We are not after fines. If we can create a public opinion that will respect this law and keep the people from poaching, that is all we want.

Chairman Whitaker: We have with us this morning a member of the Ontario Game and Fish Commission. I believe something has been done in the line of enforcement in connection with their work, though I may be mistaken. They have been somewhat active I know, within the last year, in the passage of laws, and I think in their enforcement, and I will ask Mr. Wells to give us a little information as to the condition of things in Ontario with reference to these matters.

Mr. Wells, of Chatham, Ont.: Gentlemen, I was called on very suddenly to attend this meeting, and it is only from the enforced absence of Mr. Stewart, our Chief Game Warden, and Dr. McCallum, the Chairman of the Board of Commissioners, that I was asked at the last moment to attend. He said I was only expected to be a listener, and I am not prepared to say much. Mr. Stewart says in writing me: "You can tell the Americans that our work, although but a few months old, has been successful beyond our most sanguine expectations, and that we look forward to a better condition of things in the future. Please

express our regrets at not being able to address the meeting, and ask that the printed proceedings be sent us."

By an Act of Parliament the Ontario Government appointed a commission to inquire into the workings of the game law, and that commission went through the different portions of the province. The principal sportsmen and all those interested were asked to express their views, and a full report was made up, and on that report laws were passed at the last session. I think the laws as presented were altered somewhat, but still they were not materially altered. The Board of Fish and Game Commissioners who were appointed is composed of five members who serve without pay, and these five commissioners were to recommend five wardens in the different parts of the province, who were to be paid, and also to recommend deputy wardens who were to be without pay, except half of the fines obtained from conviction. Although we have been working but a few months under the new order of things, I may say, the system seems to be working pretty well. The only trouble is we haven't enough paid wardens. We have one in western Ontario whose jurisdiction is between here and Hamilton. We have another down towards Long Point, and another in Wascana, and another down on the northern shore near Kingston. The game laws are, I think, as near perfect as we can get them. We find the greatest benefit from the non-sale clause. It has a great effect in preventing—in fact, it does away with the business. Men in our county who killed from one thousand to twelve hundred quail each year, did not take their guns down at all last year. Of course there have been violations of the law, but it has been in a small way.

I may say that I am more interested in game than fish. Ontario has not been able to do much with the fish laws. There is a conflict between the Dominion Government and the Government of Ontario as to jurisdiction over the waters, and I believe a suit is to be brought, it may be already instituted, to establish who has the right, Ontario or the Dominion Government, over the waters. After that Ontario will do something in the way of fish wardens, but now our wardens are supposed to look after the game only.

I live in the west and I don't know much about deer, or how the system is working in the north, but I know that in the west, as regards quail and ducks, etc., it seems to be working very well. And I suppose it is only getting in the thin end of the wedge as to this paid warden system, as it is very difficult to get the people to consent to have any money appropriated for the protection of fish. They seem to think it is a luxury, and those who receive the benefit of it should pay for it, but I fancy the government will appoint some paid wardens. The system of deputy wardens without pay seems to be a failure. I have not been able to get any of these deputy wardens to act, although I have taken a great deal of pains to do so; in fact, I have had to act myself in several cases. They did not seem to think it was worth their while for the small amount of pay they get, and didn't care to act. As to ducks there is a restriction that a man shall not kill more than 300 ducks in a year. There is a little opposition to that, and I might say there is a good deal of opposition to the doing away of spring duck shooting. The principal argument seems to be that you over on this side have not done away with it, and that we should not do all the protecting. We have had it in force a number of years, and they say it is quite time the Americans should join us, as they have as much interest in the birds as we have. They are shot from the time they leave us until the time they come back, and if they are to be exterminated we ought to have a hand in the extermination. But I don't think that spring shooting will ever be allowed with us again. There is a strong feeling against opening the spring season. We are anxiously looking for you on this side to join us.

Mr. Osborn: We are going to try it this winter.

Mr. Wells: And I hope you will succeed. I found several years ago they didn't allow any, and I was very much surprised. I didn't see how they would permit such a thing, and I asked some friends how they succeeded in getting such an arbitrary law passed, and he told me, Oh, you don't know what you can do until you try. So when I returned I commenced at once working up a non-sale law on quail. My friends, although they would like to see such a law passed, laughed at such an idea. They said it would be a splendid thing, but impossible to pass it. However, I kept at them, and I was surprised to see there wasn't much opposition, and they finally got the law passed as to the non-sale of quail. And we have added since grouse, woodcock, snipe, wild turkey, and I think the only thing you can sell now is duck. We found greatly increased benefit from the law in stopping the slaughter. It does away with the business.

Dr. Sweeny: I would like to say, in the way of putting a grain or two of comfort in your way, that in our recent meeting in Minneapolis, in which the States of Minnesota, Iowa and Wisconsin joined, there was a provision considered to do away with spring shooting, and also a restriction on the importation of game. The idea is to arrange it so that if a gentleman or two comes from another state for hunting they will get the permission of the game warden to send their game home out of the state, and people who are shooting for the market will not have any privileges, so that this wholesale killing will be stopped. Last night coming down on the train I met two young men who had just returned from Marinette, Wisconsin. It is now against the law to hunt deer with dogs. He told me that the warden was a very nice fellow, that he had three hounds of his own, and they had two, and they joined issues, and had a nice time. They shipped twenty-two deer away from there of their own killing. We would like to hear from some of the gentlemen from Michigan on this point; how the department for the protection of game works under the Fish Commission.

Mr. Post: I think before proceeding further, the resolution that is before the house, if the discussion is at an end, should be voted on. The Secretary has it.

Chairman Whitaker: If there is no further discussion, the Secretary will read the resolution.

Secretary Amsden: The resolution is as follows:

Resolved, That it is the sense of this conference that the necessity exists for an efficient and uniform enforcement of protective laws by a paid fish and game department, on the general basis of the New York laws."

Chairman Whitaker: I would like to say a word on the main question as to the necessity for a uniform enforcement. It must be apparent to every one that if we have uniform laws with reference to the protection of fish in Michigan and in all other states that every person would stand in the different states on the same footing. If in our territory we have a close season for fish and they have none in Ohio, and they have none in Wisconsin, it is apparent where we have a protection of fish, and the bordering states do not, we are put at a disadvantage. I speak more particularly of fish, because I am interested alone in the fish.

At the last session of the Legislature I had drawn up and presented a bill for the reformation of the fish and game warden law of this state. I am sorry to say it never saw the light of day. I am convinced, however, it was a good bill. The bill provided for certain reforms, and it was founded on our experience in the State of Michigan with the present law. Let me say, in passing, that the trouble with all our states is, with the exception of New York, they have a good law there—that their warden laws are worthless and all they are accomplishing is the enactment of statutes that are unenforced. You are commencing at the wrong end. The

trouble has been that our Chief Game Warden has drawn his salary, and has in some instances enforced the law in the inland waters. I say nothing against the desire of the warden to enforce, so far as he could individually, the laws, but it is absolutely impossible for one man in Michigan to enforce the law over the entire state. The result has been that in a few spasmodic cases the law has been enforced, but the great body of the state at large has been unprotected. For example, the County of Wayne has paid three wardens $1,200 a year each while the other counties in the state have paid nothing. The result has been that we have had little or no enforcement of the laws.

The bill I spoke of contemplated that there should be a principal fish and game warden appointed with a salary to be paid by the state. That he should have the power under certain restrictions, and with certain endorsements as to their fitness, from the proper branch of the government, to appoint not more than five nor less than three deputy wardens. It provided that the deputy wardens should be paid $500 a year and their expenses. Their salary should be paid monthly, and their expenses at such stated times as thought best, their vouchers for expenses to be endorsed by the Game Warden in Chief. The power was given also to change a warden from his own district into another district to perform the duties of his office, if necessary, thereby removing him from the local influences that surround the warden. A man doesn't like to complain of his neighbor. It removed him from political and personal prejudice and influence. Now, I believe that a system worked out on those lines would be a success, and would give a reasonable enforcement of the law all over the country. It is practically in line with the New York code of laws requiring the protection of fish and game. I hope this resolution will pass. I believe this meeting ought to adopt the resolution, and that we should decide that it is the sense of this meeting that there should be a uniform system of wardenships in all the states.

Mr. Osborn: We have tried in our state to bring our Legislature to see the desirability of a uniform law, but we find when we elect a man to the Legislature from one of our back counties, that he comes up to the Capitol knowing more than the combined wisdom of New York and all the rest of the states, and he wont agree to anything any other state has, because he knows better. I remember of once going before our fish and game committee, and getting them to report favorably on a clause in our law which afterwards became a part of our law, and it was an exact copy as it was then of the New York Sunday law. We had a member from Wood County who didn't know a wagon from a pound net, but he knew more about fish and game than all the New York Legislature. I don't know whether it would strengthen our resolution to put the word "uniform" in it or not; whether it would not be better to aim at the best, and that it is the sense of this meeting that we endeavor to reach the best system of wardency, making the New York law the model. It won't do our legislators any good to go before them with this resolution or this recommendation. They know a little better than any other Legislature, and they think they can improve on anything that anybody else has done. That is the condition of our Legislature usually.

Chairman Whitaker: I would like to ask if you have a permanent committee on game and fish, a standing committee?

Mr. Osborn: Yes, sir; it is permanent. Each body appoints its own committees. It is a standing committee.

Mr. Post: I would rather not remove the word "uniform." I think that is the best word in the resolution. We will come as near the best system as we can. We are not passing laws here now, we are only suggesting what our judgment is. I don't suppose my friend, Mr. Osborn, deprecates the idea of uniform laws, if we can reach them. It is only expressing the sense of the confer-

ence, and I have no doubt myself, that uniform laws would be much more beneficial than laws of different kinds in adjoining states, even if they were not quite as efficient. I think a uniform law covering the whole border of the lakes would be better, even if it were not as stringent, than different laws for different states. I will call or a vote on the resolution.

Secretary Amsden: Before you vote on that matter I simply want to make one or two remarks. I represent another element here—I wish there were more representing it than myself—but I believe that element is growing in this country very fast. From all my reading and correspondence I can find that people outside of the fish and game commissions, outside of the officials in this country, are beginning to wake up to the importance of the protection of fish and game. The principal ones who are alive to it are the real, honest, true sportsmen, the followers of dear old Isaac Walton.

Now, the gentlemen in all the remarks made this morning speak of the enactment of good laws, they speak of the one object of getting them passed by the different Legislatures, through political influences brought to bear upon the men who know more than they do about it. Now, gentlemen, one direction in which our efforts should be made is in the direction of cultivating a better sentiment, a more united sentiment amongst the public generally, looking toward these laws, and I think that can be accomplished by increasing and organizing clubs throughout the different states, and that is being done. Massachusetts has a very live state organization, and a large one. They have meetings three or four times during the year, and they are very enthusiastic, and they are having an effect. Illinois has a state organization, and Southern Michigan has an organization. New York State has just effected an organization that is very enthusiastic. We have our annual meeting next January. It is working great results. I think if meetings like this would attend more to the cultivating of proper sentiment, you would have less trouble in getting these laws passed. I merely speak of it in that way to draw out the idea that prevails in my own mind, that to get good laws and an enforcement of them you must have the backing of public sentiment. Without it you can do nothing. I believe that this thing is growing, and is destined to be strong all through this country.

I would like to hear from our Canadian friends. There are several here that have said nothing. You must remember that although we have called this an international conference, we do not mean that in a diplomatic sense. It is an American flexibility of a term rather than an exact expression and we can learn a great deal from what you have to say. I hope we shall be able to take home some new ideas with us, and we would be very glad to hear something further on this subject before I put the resolution.

Mr. Wilmot: I think when the fisheries questions come up we shall enter into the discussion more fully. I have a friend here who is president of a very important fishing and shooting club on Lake Erie. Perhaps he might be able to give us some ideas on the matter. Mr. Harris, of Toronto.

Mr. Harris: I am president of a sporting club, it is true, but in addressing these gentlemen I hardly know where to begin on a question of this kind. The club is pretty well known throughout the country as the Long Point Shooting Club of Lake Erie. It is a club very similar to those of the St. Clair Flats, with the exception that we own our property, which is a great resort for the wild duck, a bird of passage. Now, as regards that bird I have a word to say. The duck will soon become extinct unless spring shooting is stopped in the United States. We no doubt have the breeding ground for that bird. They breed in the north; they breed in our territory. We prevent the Indians from taking the eggs, and we have very

strict regulations with reference to their destruction. Those regulations have been still more strict lately, but they go south to you, and you shoot them in the spring, and we do nothing. I notice the Redhead is pretty nearly gone, the Canvas-back is gone, the Bald-pate is ge ting scarce, the Blue-winged Teal are getting scarce, but we have the Pin-tail in great numbers. That is a duck that the Bostonians and the New Yorkers wont eat, and I believe it has been found useless up to date to influence congressional legislation or anything of that sort in regard to that bird. It is not a go d bird. So we are having left the worst bird. I think unless something is done in this country to protect these birds of passage in the various bordering states, unless something is done to prevent their destruction, we will see the end of the wild duck in five or six years. Now, that is enough for the duck. Then we have quail, partridge, snipe, and these other birds that Mr. Wells spoke about. I have no doubt but that all these birds may be preserved by proper regulations, but they cannot be protected by any amount of regulations that we make, unless the owner of the soil, unless the farmer, unless the man who owns the property in the various states and Canada and his family who live upon that property are educated to look upon that game as their own while it is on their property. The law should be made strict enough to enable the owner of the soil to keep trespassers off. Without that, I have no faith in any regulation to prevent the extinction of the game.

In Ontario, at the last session of Parliament, the Provincial Secretary brought in a bill, which, I think, was the best all-round bill that has been prepared since game-protection laws commenced to be made. That bill enabled the owners of the soil to post their property and to post unenclosed lands. The clause enabling the unenclosed lands to be posted was defeated on the third reading of the bill, which rendered the act in that respect practically useless, because the farmers fence their fields to wh'ch the game comes occasionally, and if there is a considerable tract of land adjoining, where there is no protection, that is the place where the birds go, and they have been left in Ontario absolutely at the mercy of any person, and there is no way of keeping them off. The bill was spoiled thus.

Now the only other point which I would like to touch upon in reference to game-preservation is one which takes some time for an American, or a Canadian either, to understand. You have an immense rural area in America, and in Canada we have plenty of land. It was only a few years ago that the whole country abounded in game. It was everywhere. The quail was not here. We did not know anything about the quail in Ontario when the country was discovered, but as soon as the farmers cleared up their lands and cultivated their fields, down came that bird to make his property a little more cheerful and eat up his insects, and after the country had been settled for thirty or forty years, it was overrun with quail in all directions, as far down as Toronto and beyond that. All our people did was to net them and destroy them at every season of the year. I myself have shot them when they were whistling on the nest, when I was a boy, and didn't think I was doing any harm. Then the railroads opened, and the quail were exterminated, and now we are trying to get them back.

The same remarks apply to partridges and many other birds. But notwithstanding sparse population, compared with older countries, and with the immense extent of country we have, we are now trying to get the game back.

If you go to the other side of the Atlantic, to England, with their immense population, you will find that the country is overcrowded with these birds. You wonder that there is any room to raise a bird, but they not only produce birds for the whole of the people of Great Britain, but they export their game to Australia and to America. The

best dinners you get in New York are English pheasant and English grouse, and to-day, in Toronto, if you want a game dinner, you will find that the quail, partridge and pheasants are imported from Great Britain.

Now the only reason for this is that in England the game laws are enforced, and they are probably the most simple and the best that were ever framed by any country. As a rule, the people here regard the game laws of England as some private privilege—some arrangement for hunting people or transporting them to Australia. But all the obnoxious game laws in England were repealed in 1836, and the protection of game in England is reduced simply to this: If a man comes upon your property the law compels him to give his name and address. If he does not give it he can be fined five pounds, or $25. It does not remain with the magistrate to say how much damage he has done, whether it be fifty cents, or even less; the fine is five pounds for refusing to give his name, if he is asked to give his name and declines to do so. If a man goes upon your property and you order him off and he won't go off, you can fine him, and there is an increased fine for the second offense. You may say that upon that law all the game in England is raised. That is the whole thing. There is a severer law for night poaching, but that is no longer done. The poacher in England is not like our pothunter. The English poacher is a man that goes with nets and snares by night, and in order to avoid the law for carrying arms by night, he carries a bag of stones. That is the way he defends himself. He does not go about with a gun. The man who destroys our property is usually an intelligent, smart fellow, and according to the custom of his country, as long as he has a gun in his hand, he thinks he has a right to go anywhere, and is very seldom fined. It is a very nice arrangement as long as there is game, but if that plan is carried on for a considerable time, we won't have a bird in the country. Until you give the owners of the soil an easy and prompt remedy, you may as well look upon every bird in this country as doomed.

Chairman Whitaker: The question seems to have been pretty well discussed, and the hour is getting somewhat late, but before the vote is taken, I want to say to you that the Michigan Fish Commission extend to you an invitation to visit the hatchery on the corner of Champlain and Joseph Campau avenue, leaving here at 2 o'clock, and we would like to have you all go.

The question was then put upon the resolution and it was adopted.

On motion, the conference took a recess until 4 o'clock the same day.

At 2 o'clock the conference visited the whitefish hatchery and investigated its workings.

TUESDAY, Dec. 20, 1892, 4 P. M.

The Chairman: The conference will come to order. Since the conference took a recess the Chief Fish and Game Warden of this state has arrived. He expected to be here this morning and I want to hear from him on this question that we have discussed. For the purpose of bringing the matter up again so that he may know what it is, I will ask the Secretary to read the resolution that was unanimously adopted this morning, and then we will hear from the Game Warden.

The Secretary:

Resolved, That is the sense of this conference that the necessity exists for an efficient and uniform enforcement of protective laws by the fish and game department on the general basis of the New York law.

The President: I will say that the sub-heads discussed were:

1. Should the Department be under the Fish Commission.

2. Number of deputy wardens.

3. Compensation of Chief Warden and deputies.

4. Terms of office.

Now, gentlemen, I know that our Michigan Fish and Game Warden, Mr. Hampton, has sought to the best of his

ability to enforce the laws of this state. He has been crippled in a way that I suggested this morning, by a department that is wrongly organized. I know you would all like to hear from Mr. Hampton his opinion upon this matter and upon what should be done for a proper enforcement of the laws, I will therefore ask him to address the conference.

Mr. Hampton: Mr. Chairman and gentlemen—In the first place I want to express a regret that I was not present this morning, in view of the arrangement of the program. The chairman, however, was mistaken in saying that I expected to be here this morning; I wrote him that it would be impossible for me to be present until the afternoon. I regret that I was not present—not because I think I could have given the conference any ideas, but because I might have profited by some of the suggestions made. Inasmuch as the matter has not been passed upon, it would be hardly in good taste for me to give any suggestions, so I will only say that I approve the spirit of the resolution. However, I do not think that the New York system, if I am thoroughly informed upon that, is just what it should be. I believe, and in fact all must who know anything about the enforcement of game and fish laws, that men must be paid for their work or they will not do it. When I tell you that I have something like ' o hundred deputies in this state, and that notwithstanding that fact, more than twenty-five per cent of the convictions that we have had in this state (and we have had more than there have been in New York State) have been made upon my own complaint, that I have prosecuted perhaps twenty per cent of them you will understand how, as the chairman said, that we are crippled by having deputies who are not properly compensated.

I believe, however, that the true system of compensation is a compensation fixed upon the labor actually performed, having an officer who is responsible for the entire management, who has the power of discontinuing the pay so that, in other words, the deputies will look to the man they have got to please, the superior officer who is responsible, in order to get their compensation. I find that under our present system, our deputies in Michigan work harder to "work" the supervisors for compensation, than they do to enforce the laws. That is where the difficulty lies. Pay them out of the State Treasury for the work actually performed and the difficulty will be solved.

As I understand, the wardens in New York State are divided off into districts, and each warden receives a certain salary. I believe that is more expensive and less efficient than a system of one head with deputies working under the one direction. I do not know that it would be better for New York, but I do know that it would be better for Michigan, knowing Michigan thoroughly, that that is the system we should have here, and I would rather have a few dozen men paid five dollars a day and expenses and working under my direction, to go here and there as I direct them, than to have any other system we ever had in Michigan. During the first year this system was in vogue the deputy wardens of the State of Michigan received over $10,000. I believe in New York State they received over $15,000.

The President: I would like to ask Mr. Hampton what he thinks of the present system. I understand he has partially expressed himself, but I desire to know what he thinks of the present system of fish and game wardens in the State of Michigan, under the control of the Boards of Supervisors, so far as their compensation is concerned.

Mr. Hampton: I think this, that if you want the law enforced, it is an absurd system. I know I have prosecuted myself some of the supervisors. The supervisors, if they give any compensation at all, will give it for the men *not to enforce the law.* They do not want the men to enforce the law. It is all nonsense to allow the compensation to be fixed by a board of supervisors; it is pre-

posterous so far as the enforcement of the law is concerned. Take the matter of the compensation here in the County of Wayne, a county where there has been less need of work than any other county in the state, and they have paid until the last year as high as $3,000 a year for the enforcement of a law. The hardest work of the wardens here was in working the board of auditors. No, I think the Chairman is right in the idea he suggests by his question, and that is, the compensation must be relieved entirely of all these local elements which you must necessarily have when you trust it to the board of auditors or supervisors, or in any other local hands. Take it away from local hands and give a general influence. That is why a state warden is better than a local warden. Let me take a man from one county and send him to the other end of the state and he will do better work than a man who lives right there in the neighborhood.

The President: I think we all endorse what has been said by the Game Warden, at least we do in Michigan, and I wanted you should hear what his experience was in connection with the laws and their enforcement.

We will now proceed to the second order of business, No. 2, and I think, perhaps, in the discussi n of these matters, it will be well to take them up as an entirety. I will read them:

1. Should there be a close season for white fish?

2. If yes, what shall be the limit?

3. Shall a restriction be put upon the size of fish to be taken, or had in possession, or on the size of mesh?

4. Penalties.

There are many other things which it would be proper to discuss at this time, but the program itself is but a starting point for discussson. The matter is now open for consideration and we would be glad to hear from any member of the conference. I know of one gentleman present, the better part of whose activity for the past twenty-five years has lain in the direction of a better enforcement of laws, and in the creation of new laws, and in as rigid an enforcement as could be given. I know that he is thoroughly familiar with every point that is concerned here, and I would ask the Hon. Samuel Wilmot to respond.

Mr. Wilmot: Mr. Chairman and Gentlemen—You impose on me a rather onerous duty just now, but notwithstanding it gives me pleasure to rise and speak. Should there be a close season for whitefish? I think if it should be put, "there shall be a close season for whitefish," it would be much better, and I think the probabilities are that we would pass the resolution almost at once in favor of it. But this throws the matter open for discussion now and I beg to make some remarks upon it.

A close season for whitefish is perhaps more required than for any other species of fish on this American continent. I think the whitefish are preëminently the best fish that inhabit the fresh waters of North America, and at one time they were perhaps the most numerous, but of late years they are becoming very scarce; indeed, so much so that we find almost every state in the union whose territories border on the great lakes, is endeavoring in some way to protect them, and each is trying to out-do the other in producing the most artificially produced fry, thus giving evidence that they are considered a superior fish, and testimony that there is something that calls for this protection. Without any degree of egotism, I may say that it has been a labor of love of mine for the last twenty-five years to aid nature in its production of fish for the commercial benefit of the country, and as a luxury for the table. I may say that I originated the artificial propagation of whitefish, and therefore have taken a very prominent part all the way through in carrying out that industry, and at the same time, while I have done that, I have never been so foolish as to say that artificial culture of fish is going to supercede the natural. I regret very much to find in many states of the union, and among my own people in our

own country, that they have the idea that if they have hatcheries here and there, there is no necessity for close seasons being carried out. This feeling predominates more with fishermen than any others. It is a fallacy to think that the construction of hatcheries for the artificial breeding of fish is going to supply the want. The fishermen, however, as I said before, claim that if we build hatcheries, no close seasons will be required. This, then, brings the subject at once before me.

I am a strohg advocate of close seasons for every description of fish, not only for whitefish, but for all others, because I think in the first arrangement of nature, the balance was perfect, and when you disturb that balance, we necessarily will have to make it up by some means by which man is capable to a certain extent of bringing about, and that is by protection and by artificial production. A close season for whitefish is above all others, I think, more necessary than with any other fish. They are an innocent fish in their nature, they are not voracious. They are very prolific in their nature, and it was intended, therefore, that they would to a certain extent, keep up a sufficient supply for the more voracious fish to live upon. When that other destroyer of fish, mankind, comes in, he destroys that balance altogether, and he has done it.

The consequence is, that whitefish, of all others, should be protected, and a close season should be established for them beyond all question. I propose that every state bordering on the waters which are also within the jurisdiction of Canada, shall now meet the Canadian authorities in establishing close seasons for these fish.

In Canada we have established a close season for the month of November and we find every evidence, which cannot be very well controverted, that it is the proper month. With my view it perhaps should be a little more than the month of November, but the month of November will fairly cover the spawning season of whitefish throughout every water in this continent to which they are indigenous.

As I said this morning, in referring to the matter, a commission has been appointed by the Canadian Government to get information concerning the spawning periods of fishes and the description of the nets used to catch them, with a view of reporting to the government that it might perhaps take some better means to protect the fish. This commission has been at work for the last six weeks, and they have found at every place wherever they have been along the shores of Lake Erie, Lake Huron, Georgian Bay, Lake Simcoe and a portion of Lake Ontario, that the fishermen all unanimously say it is judicious to have a close season, but to a certain extent disagree as to when it should be. Some say a shorter period than the month of November and some say a shorter period, would be fallacious, but at the same time they all maintain there should be a close season for the preservation of fish.

The greatest obstacle we have met with is this: They say that while we advocate the propriety of a close season for white and other fish, it would appear to be almost useless to carry it out on the Canadian shores, when our cousins across the water have no close season. That is the greatest obstacle we have to encounter. All sorts of opposition has been brought against our close season. They state it has had this effect, that they, as Canadian citizens, cannot catch fish, but when they look across the water they find the Americans are fishing during that period, still those in official position simply say this that if the United States authorities take no action to preserve their fisheries it is no reason why the Canadians should not take action to preserve theirs, because in the end it must be beneficial to us, as those who do not preserve the fish must afterward come to us to get their supplies of fish.

So it is difficult with us to thoroughly establish a close season for the fish when you have no close season on your side of

the water. I am inclined to think if the people here go on, as they have been, for a series of years to come upon your side of the international boundary of the lakes, the waters will become wholly depleted of fish, but I think if the two countries will join together the result will be very beneficial.

Now, I will state as briefly as possible, the great damage that has resulted from the want of proper laws for a period of years back, and I will give you a little information that I have obtained in the last three or four weeks from practical fishermen—men who have been engaged in fishing for the last fifty years. This information has been received under oath from them, and therefore can be more fully relied upon than if merely given in the ordinary way. We find that on the Georgian Bay, which is very extensively fished in connection with Lake Huron, there are a great number of fishermen there who formerly fished on Lake Ontario thirty or forty years ago. The white fish at that time were very abundant there, and we have positive evidence from a number of persons who say that they fished in Lake Ontario some thirty years ago, and it was not unusual for them to catch as many as twenty, thirty and forty thousand white fish at one haul of the seine in a night, and we have this sworn evidence of two others who, it appeared, had joined together in fishing on one or two occasions; that one night they caught 90,000 white fish with a seine. Well, it went on, there was nothing to prevent it at that time, there was no close season, and they did as they pleased. The question was then put to them, why did you leave Lake Ontario and come up here and fish in Georgian Bay? "Well, sir, we left because the fish had gone; we pulled up our stakes and left Lake Ontario and came up to the Georgian Bay to fish." Nothing can be plainer than that.

There was a lake at one time most abundantly supplied by nature with fish. The fishermen had to leave that lake and go up to the Georgian Bay to fish, and are there now engaged in fishing, but they say, "If you allow this same procedure to go on, although you have a law now, loosely carried out as it is, the same results will be experienced in Georgian Bay as in Lake Ontario. Nothing can be more clear to my mind than that the want of judicious laws some years ago has been the cause for the loss of the abundant supply of fish in Lake Ontario. The fishing has been destroyed there so that the lake is now depleted, and the fishermen have to go to the western lakes. I therefore think that nothing can be more evident than that there should be a close season for white fish.

The second question is, "If yes, what shall be the limit?" I have expressed my views on that question, that I think it should be the month of November, because from the evidence we have obtained on Lakes Erie, Huron, Georgian Bay and portions of Lake Ontario, it seems that the most favorable season for the emission of eggs of the white fish is in the month of November, from about the 5th to the 15th or 20th, varying a little, sometimes to the end of the month, and in some cases it begins perhaps as early as the middle of October. but the month of November throughout all these waters, I am now convinced, will cover the spawning season of the white fish. Do I understand the chairman that we are to take the whole of these four questions?

The Chairman: I think it would be more convenient to do so; they naturally come together, and I think it would be better.

Mr. Wilmot: Then the next is: "Shall a restriction be put upon the size of fish to be taken or had in possession, or on the size of the mesh?" These are three important subjects. It is necessary for the preservation of fish in all waters that there should be, first, a proper close season for their spawning time; second, we should decide what time of year this shall be; and third, there should be a regulation with regard to the mesh that may be used for catch-

ing them, in order to prevent immature fish from being caught.

From the experience I have had of more than a half century with regard to this matter, I think that the proper order in which these questions should be placed is, first, the proper close season to allow the mother fish to spawn, and second, a regulation to prevent the immature and small fish being taken, those not large enough for the market or large enough to reproduce their species, and the last is the artificial propagation. I have talked upon the proper close season, which I trust will appear necessary to you.

The regulation of the mesh is now an important question because we find from our investigation, not only during the past six weeks, but from what has come under my observation for the last twenty years, that perhaps as much destruction is caused by the killing of the immature fish as of the mother fish. The mother fish may produce something but if you allow the destruction of the young before they are able to reproduce, it is like cutting a string off at both ends, you soon exterminate the species altogether. I should therefore contend that the regulation of the mesh is just as important a matter as a close season almost. The mesh should be regulated with every description of net. But the difficulty comes up with regard to the different kinds of net now in use. The pound net is advocated by a great many as being the best engine. Others again contend that the gill net is the best, but I think upon the whole that the pound net, if it is properly regulated, is superior so far as the quality of the fish produced on the market is concerned and also for the preservation of young fish, if the mesh is properly arranged. We find all the way through that the pound net has been put in operation without any sort of regulation as to the size of the mesh, or as to the pot and leader or anything. The fishermen have been allowed to do just as they pleased in every possible way. The consequence is that it has run down to such an extent that the pot or pound in which the fish are usually caught has gone down to a mesh of two inch, or an inch bar. The consequence is, that everything that gets in them will be caught, and the destruction has been going on by wholesale and it becomes the duty of all persons who are the conservers of the fishing interests of the country to establish a proper mesh for the pot of the pound net, otherwise you are doing as much harm nearly as in killing the mother fish with her eggs.

You can readily understand with an inch bar or a two-inch mesh, a net must be very destructive to almost everything and you will understand that whitefish of six, seven, eight or nine inches, are taken in abundance. The strongest evidence of their being unsalable, is that they are buried in the sands. Could anything be more wicked? But we have evidence strongly to that effect that they get into these nets and the fishermen are not going to be bothered with letting them go again, and in fact the white fish is so delicate in its nature that the slightest injury causes its death, and they bring them ashore and they are some times buried in the sands. You can readily understand what a vast amount of injury results from that. In the first place, it is the killing during the close season and the next is the killing of the immature fish. This should be remedied by all means, and if the United States authorities would join with Canada in these matters and regulate the pound net with regard to its mesh, something may result from it. But to allow the matter to go on as it is now, nothing else but ruin will be the result. This not only applies to whitefish, but to every other kind of fish. A mesh of an inch or two inches will take almost anything in the way of fish and when you legislate in favor of whitefish, you legislate in favor of every other fish which is valuable as a table fish or for commercial purposes.

Now, as to artificial propagation. I may be said to be one of the fathers of it on this continent, but I have never gone so far or been so foolish as to

make a remark that by this means we are going to overcome nature. I have always held that artificial breeding of fish was merely a supplemental aid to nature. To say that it is going to outdo nature, and that we can use artifice and allow man to destroy as he wishes, is a fallacy. I have never held that view. But, let us have the size of the meshs for your nets regulated on the American side of our lakes and the Canadian side, and I think there is a chance of, to a certain extent, recuperating this wealth which is now nearly gone. Therefore I think it behooves an intelligent gathering like this to come to a conclusion, and prepare for their proper authorities reports showing the necessity for having a description of net that may be used which would not destroy the immature fish, and it further behooves them to use all the influence they can to obtain a proper close season and see that the laws in this regard are properly enforced.

The Chairman: Gentlemen of the conference—The matter is open for your discussion and we will be very glad to hear from any of you.

Mr. Huntington: I would like to have Mr. Wilmot explain their system and to what extent they are protecting the whitefish, and also their laws as to the size of the mesh.

Mr. Wilmot: The close season of Canada at the present time, which has been in force for a number of years, is the month of November. There was a change a few years ago to the first ten days of November, and they were set aside as the close season, but that was a mistake, It did not cover a sufficient period of time, and they have extended the time now to the month of November, because in doing that it takes in the whole of the breeding season of white fish. But the difficulty has been that in many instances political influence has been such that a few individuals in a locality will club together and say, "That close season does not satisfy us, and we will apply to the gentleman who represents our constituency to have it set aside for a time," or something in that way. We have found the greatest difficulty runs in that line. Take the Detroit River, for instance. It is the international boundary and it is a narrow stream, but the white fish have become almost exterminated simply because it was a resort for the white fish of Lake Erie to come and cast their eggs and reproduce their young. We in Canada always had a close season for white fish, but on the American side they have not had a close season, and consequently the Government of Canada has been importuned from time to time to do away with the close season as far as the Detroit River is concerned, and those who have advocated that question gained their point in a measure, so that in many cases the close season of the Detroit River has been set aside for a year to gratify the greed of the fishermen on the Canadian side. The consequence has been that by excessive fishing on the part of the people on the American side, with the aid of the Canadians on their side, the Detroit River, once famous for white fish, has become almost depleted. It is very difficult now to get enough fish to supply the hatcheries with eggs from the Detroit River, while some eighteen years ago, and in one afternoon, I have gotten all the eggs we wanted for our hatcheries.

Mr. Huntington: I will state that what I desired was that you should give us the matter as it stands to-day, what protection you are affording the white fish on the lakes. In other words, what are the laws affecting the white fish to-day?

Mr. Wilmot: The laws of the present day in Canada are that the month of November is designated as a close season, but unfortunately in Canada, as in every other country, these laws are overrun, and they still continue to catch fish in certain localities, but we are under the impression that if the authorities on the United States side will join us, we can carry it out to much greater perfection.

Mr. Huntington: Have you any regu-

lation in regard to the mesh of the net?

Mr. Wilmot: It is the wish of the Dominion of Canada to establish laws for the regulation of the pound net. The regulation was passed last year, and immediately afterward opposition was brought to bear by the fishermen, and it was left in abeyance and put over for a short time until an investigation should be made by a committee or by a deputation which consisted of myself and my friends here, and we have gone around the lakes and obtained all the information we can, and have come to the conclusion that the pound net of the present description and mesh, viz., an inch mesh, is one of the most destructive engines in existence. The pound net, with a proper regulation of mesh, might be perhaps the best engine for catching fish.

Mr. Huntington: What kind of net would you recommend?

Mr. Wilmot: I would recommend the pound net as being superior to any other if regulated with a proper description of mesh.

Mr. Huntington: The question I ask is what mesh?

Mr. Wilmot: Nothing less than four or four and a half inches.

The Secretary: Four and a half extension?

Mr. Wilmot: Four and a half inch extension, or five inches. We have found that nearly all the whitefish caught in Lake Superior, Lake Huron and Lake Erie are caught in a net with a mesh of four and a half to five inches and the fishermen seem to be satisfied with that, but when you bring it down to an inch square mesh, or two-inch extension mesh in the pound net, you catch everything, —immature fish, young, old and everything.

Mr. Huntington: With a four and a half inch mesh how would you catch herring?

Mr. Wilmot: You might as well say, if you got an inch mesh or an inch and a half square for catching whitefish or any other kind of fish, what would you do with regard to catching small herring. It is simply this, if you wish to preserve other kinds of fish than the whitefish, then you must establish a net that little fish will be caught in, otherwise they will be lost as they have in Lake Ontario and as they are going in Lake Huron. The whitefish on the Canadian side are protected by the month of November as a close season, and so far as is possible the law is carried out, but we all know perfectly well that much illegal fishing is carried on in places on the various lakes, but the close season of the month of November is kept for whitefish in Canada, and as you know we are meeting with the greatest difficulty in the world to carry out our laws. Our fishermen say that their neighbors on the opposite side of the lakes have no close season for whitefish, and you enforce a close season with us. Yet, when you go around and make an investigation as my two friends and myself have been doing, for the last six weeks, you will understand the situation. We find they all come up and say that a close season is most advisable, but we would like you to make the Americans have a close season. This, of course, we cannot do, but I hope from the remarks that will follow this evening, that the gentlemen who represent the various states bordering on the lakes, with Canada, will see the propriety of having a close season for whitefish, and that it is thoroughly carried out.

The Chairman: As I understand, you prohibit all netting that month?

Mr. Wilmot: We prohibit fishing of all kinds for salmon, trout or whitefish, and herring. They are all of the same family and they all spawn about the same time.

Mr. Keyes: I would like to ask if there is a law in Canada protecting the sturgeon and that kind of fish?

Mr. Wilmot: Yes, we have a law which protects our spring spawning fish, taking in particularly bass and pike, and muskalonge and others considered of commercial value. We have a law in Canada which takes in the close season

of the month of November to cover the salmon trout, the whitefish and the herring.

The Chairman: We have with us a number of fishermen, and we would be very glad to hear from them on this subject.

Mr. Keyes, of Ohio: Regarding this matter of a close season I have certainly some convictions. The difficulty along our part of the line of Lake Erie, which we have to encounter, is that the time that you can take these fish best for the market is in the month of November, and in no other month to speak of can you take any white fish in the head of Lake Erie. It is true that the head of Lake Erie is the natural spawning ground probably for the white fish, but if you do not take them in the fall with pound nets and other appliances in the head of Lake Erie, they must then take them with the gill nets. But in the head of Lake Erie is where they do catch them, and even now, in the depleted condition of Lake Erie, they catch them in certain quantities in the spring. Of course white fish have largely decreased, but there were more white fish taken this fall in Lake Erie than have been taken for a number of years. Probably this may be due to white fish propagation, but I think it more largely due to the fact that it has ceased to be profitable to fish with gill nets, and consequently the only white fish that are taken to speak of are those on the spawning grounds that come to the head of Lake Erie in the fall and are taken in the pounds, except a few taken with gill nets at the head of Lake Erie. The law of the State of Ohio is that no gill or pound net can be set upon a reef in the spawning season, and it names the time, but these gill nets that catch the white fish on the head of Lake Erie are always on the reefs.

The Chairman: What is that time?

Mr. Keyes: It is at any time; no gill net or pound net can be placed upon a reef in the waters of Ohio at any season of the year. And there is where all the gill net white fish are taken, upon the reefs. With the pound net of course it is the fish that comes to it, it cannot go after a fish. It is a stationary net and the leaders and the heart are all from six to seven inch mesh in size.

The Secretary: How is the pot?

Mr. Keyes: That is usually two inches.

The Secretary: Two inch extension?

Mr. Keyes: One inch bar; we call it two inch mesh.

The Chairman: What part of the net do you say is six or seven inches?

Mr. Keyes: The leader and the heart. The leader of the net is the part the fish travel along, say 80 or 90 rods in length. In former times they used to fish the pots, so-called, with meshes as high as three and a quarter or three and a half inches, but it killed so many fish that way that it was almost impossible to raise the nets, and it would destroy them in a couple of seasons. It is difficult to say as to the size of the mesh. Of course you might get it big enough so that even a sturgeon would go through, but you will always strike a size which will gill a certain proportion, and of course they die and are utterly useless as a commercial commodity. They are, in my opinion, not fit to eat. When a fish is drowned by reason of being gilled in a net there is no question that almost instantly that fish becomes in a measure decomposed. I am referring now to the dead fish only that are in a net, whether it is a gill net or a pound net, and no one ever saw a fish that came out of the water dead that was not bloated to a certain extent, and of course no one will say that a bloated fish is a good fish to eat.

The Secretary: That is a very strong argument against gill nets.

Mr. Keyes: I am very much opposed to the gill net system, but I am not saying anything about it. I think that it is wrong to fish with it under any circumstances at any time. I do not think a net should be so set that a fish can struggle and struggle and struggle until it dies from exhaustion and exertion. I do not think that is a proper way to kill an animal for food—any more than

that the laws of any state or of Canada should permit the strangling of cattle and then have them put on the market. If you had an animal that was strangled in the crib and hung there until it died, you might, if you did not have a good honest conscience say, well, I will sell this to my neighbor, I will not eat it. It might not kill your neighbor, of course, but it would not be food you would put on your own table.

Now, the close season question is a question of vital interest and importance. There is a close season already in the State of Ohio, which is from the 15th day of June until the 15th day of September. That of course is not in the spawning season of the white fish, and that law was strictly enforced last year and pretty well enforced the year before. This fall a good many of the pound net men who drove their pound stakes, hung on their leaders, and they never lifted their nets, mind you. Mr. Osborn and his brother had those men arrested and fined and they had to pay their fine; they never took the fish out of the net. But I never heard of a gill net man being arrested for his work, and they are always fishing on the reefs.

Now, as to the big mesh of which Mr. Wilmot has spoken. If it was practical it would be a good idea, but to put a mesh of say four or four and a half inches, a large majority of the herring would go through that, and you could not catch them at all, and the greater majority of the big ones would certainly stick fast in the net. I agree with him most decidedly, and a committee has already been appointed in our section embracing the whole of the head of Lake Erie, Toledo, Sandusky and Cleveland, and we will get a law passed in the Legislature this winter, making it a penalty with a reasonably heavy fine attached for any fishermen who shall bring ashore from their nets any fish under size and unsuitable for the market, and also a penalty upon any man who will sell them. Some of the fishermen say, we cannot sort them, but we put the question to them and (understand we all fish nets as well as handle fish on shore), "Suppose there was a penalty of $25 for the first offense and $50 for the second offense for bringing ashore a fish less than a certain size established by law, don't you suppose you could pick them out?" "Oh, yes if we had to, but it would take longer time." Of course, but let them take longer, that is all.

There is no doubt that the destruction of the small fish is a grevious offense against the industry and ought to be stopped, and it can be stopped. There is no question but what in the pound net system the small fish can be thrown overboard and allowed to go. Of course some may come in with some catch, there is no certainty to it. Now, take a pound net. I speak of the pound net for I have never fished with a gill net and I hope I never will. The pound net is set stationary, with poles, it cannot be moved. If the fish go to it and follow its leaders it takes them. A majority of the fish could go right through the leader. There is not a herring that will ever gill in a leader or heart. In the fall we have found a few that have gilled. Fish spawn all over the head of Lake Erie. I do not believe there is any place they do not spawn when they get in the shallow water.

The headwaters of Lake Erie, commencing on a line about Vermillion, directly opposite the dummy light on Pelee Island Point, is what gill net men call the reef. On this ridge, of late years, they have set their gill nets. Now then the question arises, and it is a fair question for gill net men and pound net men and every other man connected with fisheries, whether the reduction in the catch of fish is so much owing to the amount of fish caught by the nets of all descriptions as it is owing to the amount of fish that are turned back from the natural spawning grounds and not allowed to deposit their eggs where nature requires it, and thus their spawn becomes less. Nature compels them to go to a certain place to lay their eggs, and if they cannot reach their spawning grounds, and if they are pre-

vented by nets strung along there through Lake Erie and finally deposit their spawn wherever they happen to be, that spawn fails to reproduce—whether that accounts for the reduction in the fish or whether the quantity of your catch accounts for it is a question. I think and I believe it is the general opinion of nearly every practical fisherman who sees it, that it is much the greater reason that the fish are not productive by reason of the long string of gill nets which prevents them from getting to the natural spawning beds of Lake Erie.

You take it just a little above Cleveland and you will find strings of pound nets reaching out into the lake, eight, nine and ten miles from the shore, string after string until you get well up towards Sandusky Bay, and then beyond those pound nets are strings of gill nets reaching clear over into the Canada waters and whether there is a close season in Canada or not, they run their gill nets clear over across to Pelee Island, and they do not make any bones about it. There is a wall of net stretching across Lake Erie, and I will ask how those fish can reach their spawning ground? I believe that if a law could be passed compelling fishermen to put overboard the small fish which are unsuitable for food and unfit for the market, that it would be a far greater benefit to the fishing industry of the great lakes than to have all the close seasons you could adopt. Now, there is no use of making a close season to shut out this article of food. You take the fishing of Ohio, and you take the month of November out of the fishing month, and you might just as well hang up your nets entirely on the American side, that is, on the head waters. The month of November is the only time that it is possible to catch the fish, that is to fish for commerce, and I believe this meeting is more in the interest of commerce than it is of sport, because if it was a mere matter of catching fish with hook and line, it would not matter much to us one way or the other. It is a question of furnishing good food to the poorer class of people of this country as well as the rich.

You take the herring, which years ago was not considered of any value simply because the other fish were so cheap. When the whitefish became so high priced, the herring then went on the market, and it is greatly demanded in the big cities of the east. New York, Philadelphia, Baltimore and Washington consume at least two-thirds of all the herring that are taken in Lake Erie—that is of the fresh herring taken. They go onto the market against the salt water fish, strange as it may seem, and because it is so cheap and supplies a cheap food and a good food, they are demanded very much. There are a great many hundreds of thousands of dollars invested in fishing boats in Lake Erie and especially in the head waters, and when I refer to the head waters I mean from Cleveland up. These men interested have their plants, they have got their outfits, their boats and their docks and their nets and their vessels, and they see before them, unless something is done, a very near future when fishing will utterly cease in Lake Erie as it has ceased in nearly all of the great lakes, and the dealers and fishermen are ready to go hand in hand with anybody or with any set of men who will propose a scheme that will be practicable and give some hopes of reasonable success. But I very much doubt whether a law establishing a close season of November could be passed in the State of Ohio, and if it would be passed it would simply take that product entirely out of the market, because that is the month in which they are caught. They would simply go back to the lower end of the lake and be taken with other appliances in the spring.

Mr. Osborn: With a two-inch mesh could fishermen get clear of the small fish, throw them back?

Mr. Keyes: The question of time does not enter into the consideration of this question at all. It will take a little longer of course to sort them out. All they have got to do is to handle these

fish with their hands and throw the small ones overboard.

The Chairman: I would like to know what is the object of taking the young fish in the net at all if you are going to put them overboard?

Mr. Keyes: You cannot help yourself, the fish are all caught together and you have to pick them out just as they come, you cannot sift them out through a sieve.

The Chairman: Why could you not regulate it as suggested here by the mesh of the pot?

Mr. Keyes: The trouble is, you would gill so many fish. You would gill more fish that are of a suitable size for the market than you would save of the small fish that would run through. You will often catch minnows in a pound net, but what is to hinder minnows running through? Many a minnow is caught, the fish get scared and the first thing they know they are in there with a pile of fish and the minnows themselves won't get through. No matter what the size of the mesh is, any practical fisherman will tell you at once that you would still get many of the small ones, because the fish do not go through. If they did, those fish need not follow these leaders. If it was the nature of the fish to run through every hole they could find, they would get through these leaders at all times.

The Chairman: I was going to call your attention to that because we know, as a matter of fact, the size of the mesh of the leader and heart cuts no figure whatever.

Mr. Keyes: It is just the same, that is, the fish is a very timid animal, and it does not take much to frighten him. At the same time he is a little curious, and so he follows this shadow, while he could just as well pass through if he wanted to, if he had any desire to go that way. He need not come around, but he prefers to go on. It is the same way in the pound, they swim round and round.

The Secretary: Do you think if the pot has a small mesh the fish would be hurt less?

Mr. Keyes: They do not hurt them at all. Take it when there is a heavy storm which lasts for two or three days, and you will find very few of the fish hurt.

Mr. Post: I would like to inquire what the season of herring fishing on Lake Erie is?

Mr. Keyes: They generally commence to catch them early and catch them all the time. You catch all summer. You may commence to fish in the latter part of September, but they do not usually get a good run of herring to amount to anything until the 20th of October.

Mr. Post: It is pretty nearly over in the month of November?

Mr. Keyes: We get the heaviest fishing usually in the month of November, and usually the best week's fishing along about Thanksgiving Day.

The Secretary: At the same time you get these herring do you get white fish in the pound?

Mr. Keyes: We get white fish all the time, but in limited quantities. Of course the great bulk of the white fish taken in the head of Lake Erie are taken in the gill nets upon the reefs.

Mr. Post: I thought the herring spawning preceded that of the white fish?

Mr. Keyes: It does, but the white fish come on about the same time, and the spawning season is the same. About the 1st of November we generally look for spawn in the boats when the boats come ashore.

The Secretary: Some years ago there were not so many herring in Lake Erie as now.

Mr. Keyes: The herring fishery has never been even. There probably never was a shorter season than this season for the last fifteen years. There probably were more herring taken from the waters of Lake Erie four years ago than had ever been taken before. That season the Sandusky freezers had 28 tons of herring frozen, and there was something like 30,000 or 40,000 barrels of salt

herring. It was so all along the lakes. Before that there had been short seasons, but not anything like this season.

The Secretary: Take an equal number of pounds of herring and white fish, and what is the difference in the profit to the dealers.

Mr. Keyes: Of course our business is all wholesale. The white fish are about eight cents a pound. The average price for fresh herring is about two cents. I am speaking of this winter. Of course the herring are sold in the markets of Philadelphia, when they are plenty, at about $3.00 a barrel.

The Secretary: If you were going to have one or the other, which would you prefer for your business?

Mr. Keyes: The herring. In the first place, if you had as many white fish as herring the markets of the country would not pay any more than three or four cents a pound, and I doubt even if they would take them then.

The Secretary: If white fish were plenty they would be that price, wouldn't they?

Mr. Keyes: Certainly. The herring is sold largely as a smoked commodity. It is a regular business, and it is about the only fish treated in that way which is a success, except the sturgeon. That is one reason why it is becoming so popular in the last few years. It is only a few years ago that we had no freezers.

I want to get back to the question of a close season. As between Canada and the United States, it is a question of considerable depth. The white fish does not frequent Canadian waters; it is not our experience as fishermen at all that it frequents the waters of Canada, especially this end of Lake Erie, as they do the other side. The spawning beds seem to be around there. If you shut off the month of November, and that is the spawning month, no doubt; you would destroy the whole commercial industry that has been built up on this side of the lake, and of course you understand that would be quite a task to perform. But if something can be arrived at that will not destroy this fishing industry, but will tend to build it up and preserve the fishing, I do not think there is a fisherman that is not willing to do all in his power to help it along.

The Chairman: During how many months of the year is fishing prosecuted in Lake Erie?

Mr. Keyes: The whole year round. In Pennsylvania there is no law, and in Ohio waters, so far as it is possible for the commissioners to enforce the law, I think they are enforcing it. There is no fishing between the 15th of June and the 15th of September.

The Secretary: Why were those dates fixed; what is accomplished by it?

Mr. Keyes: Largely fixed from the fact that the fish taken at that time is not really a good article of food. It was not for the protection of the fish particulary, except that it does give them three or four months' rest.

The Chairman: Do you think it would be an unjust thing to give the fish a rest, not only for Lake Erie but for all the lakes, for one month in the year?

Mr. Keyes: It would depend on what month you select.

The Chairman: The spawning month.

Mr. Keyes: Then you select the only month in the year in which that fish can be taken to any advantage, and there would no good grow out of the law because you would not get the fish in that neighborhood.

The Chairman: What are they doing the other 11 months in the year in Lake Erie?

Mr. Keyes: When they can get out in the winter with their gill nets they fish all winter. They do not catch to any great extent, but they are fishing now in Lake Erie just as well as they were last fall. They fish there all the time in deep water until they cannot get their tugs out because of the ice, and whether a certain close season would be a good thing I do not know. I do not know but a close season in the winter would certainly be a benefit to the fish as well as in the summer, but if you would make a close season at a time when they can be best caught for the

market, which is in the month of November—

The Chairman: Isn't that because they are running on to the spawning beds and you know those are well defined grounds and you can catch them easier at that time?

Mr. Keyes: The whole head of the lake, from Pelee Island and the Dummy Light to Vermillion, is one continual spawning ground. I claim that there is not one fish in five hundred that comes up through those waters that ever gets into the pound net; I doubt it very much. If even half of them are caught and they give time for the other half to spawn, you will have all the spawn you want. It is a question in my mind whether you are going to establish a rule that will allow those fish to get on the spawning ground, because I think it is going to be difficult to get a law through the Legislature of Ohio or Michigan which will say you cannot fish in these waters at a time and the only time when they can be taken, as a commodity, in November.

The Secretary: Isn't it generally understood that when fish are at their season of reproduction they are not fit for food?

Mr. Keyes: They are taken and considered the very best. You take the case of shad. A roe shad brings just twice the price of a buck shad.

The Chairman: Is that on account of the roe?

Mr. Keyes: They want to get the eggs, I suppose.

The Chairman: That is what I supposed.

Mr. Keyes: The herring spawns altogether in the fall. In the spring they are a much poorer fish than in the fall. The herring taken along in June and July are a much better fish, on the Canada side; that is the only time you can catch them, at that time of year they run there——

Mr. Wilmot: For protection they come there. (Laughter.)

Mr. Keyes: They catch them in large quantities at that time.

The Secretary: They do not even get the protection. You follow them over and catch them.

Mr. Keyes: As far as Canadian waters are concerned, these fish are taken in large quantities in July and August.

Dr. Parker: Returning to the size of the mesh. You said I think that the fish seldom gill in the leaders, or heart. You find but very little trouble in that.

Mr. Keyes: Yes.

Dr. Parker: When do they gill in the pound?

Mr. Keyes: They do not gill in the pound because the mesh is so small they cannot gill. The herring is the worst of all fish to gill, and in the season they will just line a pound right around, it will be perfectly white all around, in nearly every mesh there will be a herring.

Dr. Parker: They stay there until you come to haul them?

Mr. Keyes: Oh, yes, you find them there before, but it is worse when they crowd them. As you crowd them they rush to get out.

Dr. Parker: The greatest amount of gilling is done at the time of the haul?

Mr. Keyes: Well, before you get the nets pulled out.

Dr. Parker: The greatest trouble is to get them out of there and save them for the market.

Mr. Keyes: The greatest trouble is they gill all the time, from the time the fishing is commenced.

Mr. Osborn: We find there were many tons of small fish taken out of Sandusky Bay and sold to the phosphate factories at 65 cents for 400 pounds.

Mr. Keyes: There is nobody recognizes that fact any more than the dealers in Sandusky. They are all fishermen and they are only too ready to comply with a law that would prevent that, if it can be passed.

Mr. Osborn: What would be the penalty?

Mr. Keyes: I would put it so big that the second offense would be seldom heard of. I would not make the fine one cent less than $25 a fish. All of our

dealers are unanimously in favor of getting a law of that kind through the Legislature. That certainly would be a very strong step in the right direction, but that we can succeed in getting a close season for the month of November I very much doubt, or that you would even get a respectful hearing before the Fish and Game Commission of the states, because of the men interested.

E. W. Gould, Commissioner Sea and Shore Fisheries of Maine: Mr. Chairman and Gentlemen of the Conference: In the experience of the Maine Commission of Sea and Shore Fisheries there can only be one correct answer given to this question, if the end in view is preservation and restoration of our fish. A broader view may with propriety be taken of the subject, and include all edible fish. In Maine waters the white fish is not a prominent one; but the salmon most abound. Nature has insisted upon a uniformity of laws governing all fish life, and has instituted a most wonderful harmony in apportioning to each kind of fish its peculiar characteristics, habits, localities, time for reproducing its kind, etc., so that when nature establishes a season during which one species ought to be fully protected, another of somewhat different habits is in its prime condition, thus wisely ordaining such a condition of affairs as will keep up throughout the entire year the fish food supply of the people. To assist nature in keeping up the supply the intelligence of man comes in as an auxiliary, utilizing the forces and existing conditions of nature to artificially propagate certain fish to replenish the waters, and this, to a certain extent, has succeeded very nicely, but man has never been able to approximate nature in this work, and of necessity, while acting as assistant, must devise some different plan to further increase the young fish.

The fish and game of the American continent at present under the control of each individual state, have been held by the state governments as a sacred trust for the people from time immemorial; and now the thinking portion of the people are slowly awakening to the fact that the danger line of extinction has been passed in some instances, and being rapidly approached in nearly all others. They view with great apprehension the slaughter of the finny tribes going on, and the consequent alarming diminution in their numbers, while with the convening of our different legislatures, petitions come pouring in from all sections asking special laws to be enacted for the protection from the poacher or pot fisherman certain local or private lands; also praying for a more rigid enforcement of the existing laws regulating the taking of fish and game.

The question might with propriety be asked to "*what cause is assigned this great depeletion of our fisheries?*"

To those who have made a study of fish life and its underlying conditions the answer is a very simple and exceedingly plain one. Simply exhaustive fishing and at improper seasons. But here in answering the question enters a disturbing element, the intensely interested wealthy parties who, through their engines of destruction, have enriched themselves at the expense of the people, and who now are aware that the laity are becoming educated up to what is theirs by right, and that at no far distant day their revenue from this source will be curtailed. These men appear in conjunction with the legislatures, and sending their most suasive members, answer this question, without exception prefacing their remarks by first giving a glowing account of the immense industry they represent, the large number of men they employ, and the large amount of general good that is the result of their operations. Then is paraded their intimate knowledge of fish life and the natural conditions which tend to the perpetuation of the species, and in the majority of cases, if the time of the committee or meeting where this question comes up is limited, they enter exhaustively into the general subject, and while arranging themselves to all appearance on the side of intelligent restriction,

oppose strenuously any restrictive measures that would be effective, confining themselves to some minor restriction, such as the liberation of fish below a given weight or size, or mesh of net, by this means hoping to throw the burden of expense on the fishermen and the state to see these measures enforced and to eventually create a prejudice against restriction by reason of these wardships.

Should this fail them, then they, as a last resort, earnestly advocate investigation at the expense of the state and experiments as to the better means of protection.

These, gentlemen, without attempting to weary you, are a few of the subterfuges employed by these interests.

The more intelligent fishermen promptly range themselves on the side of protection and preservation, foreseeing that without some means being employed to prevent this wanton destruction the business will not survive itself.

From these facts among many others, and from a practical and substantial benefit arising from it, the Commission of Sea and Shore Fisheries of Maine emphatically advocates protection for all edible fish during their season for spawning, and in the absence of an intimate knowledge of the requirements, to protect any fish in a given instance, would recommend such restrictive legislation on that subject as will leave no doubt as to its efficacy until such investigation can be made as will enable intelligent suggestions to be made to the legislatures by the commissioners.

The Chairman: Gentlemen, it is getting somewhat late, and I fancy there is very much more to be said upon this matter. It does seem to me that concessions must be made by the fishermen as well as by the people. Because of the physical characteristics of a given water the spawning beds may lie in one end of the water or in the other, and it does seem to me as though some sort of an opportunity ought to be given the fish to spawn when they run on these spawning beds. I deem it unfortunate because of the location of the fishermen, as they would be injured more in Lake Erie on the western reefs than in the east end of the lake, because there are no spawning beds there. If we are going to do anything except exterminate the fish entirely, we must come to some sort of an understanding, not prejudicing the rights of one party nor of the other, and I would suggest the propriety of not attempting by the suggestion to in any way shut off debate, because we want to consider this subject fairly and candidly. I would suggest the appointment of a committee to confer upon this matter and to report at tomorrow's meeting.

Mr. Wilmot: I hardly think the end will be obtained so thoroughly in that way as by an open discussion. The reason why I say that is this, that some of us may not be able to remain during the continuance of your session, and as this is of vital importanee to Canada and the United States, I think an open discussion of the matter will be much better than to leave it to a committee to bring in a certain report. The object of this meeting, I understand, is to take up the matter as a whole. If the views are entertained which our friend, Mr. Keyes, has expressed, it will be useless for us to remain here, of course, but as I understand the matter, the meeting is for the purpose of preserving and husbanding the fisheries of the country. I think an open discussion of the matter will be well, and much better than leaving it to a committee to make a report upon. This meeting has been called for the purpose of discussing the merits of the preservation of the fisheries of the lakes in this country and in Canada. We have a close season on our side of the water. The gentleman who has just sat down (Mr. Keyes) says that if you have a close season for the month of November you might just as well close up his business. In Lake Winnipeg, where they have the best white fishing in the world, they never fish beyond the 15th of October; they never desire to fish. They say their best fish-

ing is before that, whereas in Lake Erie, this gentleman tells us, they could not fish at all if they did not fish in the month of November. I take that as an incorrect statement. I think it would be much better to have an open discussion.

Mr. Hampton. I think the gentleman is entirely right. But while we all concede the necessity of an open discussion, we must recognize this fact, that if we have nothing but discussion, we will not accomplish anything. As I understand, the object of the meeting is to take some steps that will result in something beneficial. The idea of the representative from the Dominion (Mr. Wilmot) is to preserve the fish not only for the people, but for the fishermen of the country. I believe we are all united in regard to this, and the only difficulty is a disagreement as to the manner of doing it.

Mr. Keyes: Let me say this one word, that Mr. Wilmot entirely misunderstands me if he thinks for a moment that I would stand on this floor and advocate the destruction of the fish of Lake Erie or any other, except in the catching of the fish, which has always been considered a legitimate business, and the catching of them of course destroys them.

The Chairman: I am inclined to think that we ought to have plenty of time for the discussion of this subject, and I think the best way is to have an evening session.

Mr. Post: I am myself very much in favor of a committee, and I think we are entitled to the appointment of a committee after further discussion. I would like to inquire if it is the sense of the Conference that we have an evening session? I will make that motion, that we do have an evening session, commencing at eight o'clock.

The motion was carried and the conference took a recess until 8 p. m.

EVENING SESSION,
Dec. 20, 1892, 8 P. M.

The Chairman: The conference will please come to order. When the conference took its recess it had under consideration topic No. 2, and that topic is still open for discussion.

Dr. Sweeny: Before the discussion opens, while I have not the slightest idea of restricting anybody, I would like every gentleman to have the courage of his convictions and say just what he thinks on this subject. I would ask that the conference concur in this motion and that the speeches shall not exceed ten minutes in length, so that every one will have a chance to say something, and I will make the motion that speeches be limited to ten minutes.

This motion was supported and carried.

Mr. Osborn: What would be the objection to putting both of these topics on for discussion, two and three are largely alike as to a good many parts, and when the committee of which we talked is appointed, it could cover the two topics without any more work than covering one.

The Chairman: We have the whole of to-morrow before us for the consideration of these other topics, and we do not want to be idle all the day. If there is any gentleman here who desires to express himself on this third topic by reason of being called away. I think that the conference will be very glad to listen to him. I think the consideration of topic No. 3 had better be postponed until to-morrow unless some such emergency as that arises. I understand, Mr. Osborn, that you expected to go away to-morrow, but you will be here in the morning anyway. The chair is now ready to listen to further discussion. Dr. Sweeny, the conference has not had the pleasure of hearing from you on this subject and I presume they would be delighted to hear from you.

Dr. Sweeny: Mr. Chairman—I have listened to our friend Mr. Keyes on this subject, to his very interesting and ingenious argument, but I must say that he has not convinced me, and I am afraid that the more I think on it the less I am likely to be convinced.

know from the experience of the protection given by the Canadian authorities to white fish on Lake Superior that it is most beneficent. The difference between our fishing on the north shore of Lake Superior, in our waters and theirs, is most marked. When you get within 35 or 30 miles of the Canadian line the fishing is fairly good, and when you cross it it is excellent compared to what it is on our side. The greater bulk of the white fish are obtained from Port Arthur now, and the fishermen of Lake Superior, on the north shore, are so well satisfied that it is the right thing to do that they have expressed to me their willingness, without any solicitation on our part, that we should join with the Canadians in having the same close season. They say if there is such a law so that this man cannot fish and that man cannot fish, we are willing to abide by it, and we know it is the best thing that can be done. The difference in the fishing now from what it was a few years ago, say 20 or 25 years ago, is very marked. We used to get white fish all the way up to Duluth; all along the Minnesota shore and the Wisconsin shore, it was all good white fishing, but now there are scarcely any white fish taken until you get towards Bayfield. Very few are taken on the Wisconsin shore, none along Minnesota point; and this season, for the first time in fifteen years, or a little less than that, the fishermen are beginning to make pretty good catches along the north shore of small white fish, which they attribute to the planting of fish at the head of the lake. It is their opinion that a close season for white fish, the same as the Canadians have, from November 1st to December 1st, will be the salvation of the fishing. If they are allowed to go on as they have been the fishing will be exterminated. They are catching some fish of our plant a little larger than herring and about the size of herring, and from that to fish 15 and 16 inches long, and they are so well satisfied that the protection of a close season is the salvation of the fishing that they assured me that if such a law is passed they would be willing and glad to abide by it. I feel myself that that is the right thing to do, and I feel that our position that we should protect the fish in the spawning season is right. Notwithstanding the arguments that I have heard, not only to-day but for years past, I am sure that the right position is to maintain a close season.

In regard to our fisheries in Lake Superior, I think our legislature will pass such a law, but whether that is the wiser thing to do further south, should be well considered, I think thoroughly considered before a concession is made to abandon any attempt at having a close season. It seems to me that is the surest and safest way to conserve all fisheries.

Mr. Keyes: I would like to ask the doctor a question or two before he sits down. Do you, in your opinion, think that a close season in November will prevent the depletion of the fish, and if you do, why would it not be better to not catch them at all?

Dr. Sweeny: Well, I think if the fishermen are satisfied they can get along without catching them, that that would be a surer way yet to increase the supply of white fish.

Mr. Keyes: That is exactly the argument I make.

Dr. Sweeny: I know, but I hardly think that is a fair argument. You know just as well as I do that if protected they will increase, but it is this destructive and persistent fishing in season and out of season that has destroyed the abundance of fish.

Mr. Keyes: That is true.

Dr. Sweeny: Naturally there is a balance established in all animal life, either in the water or in the air, and if a disturbing element—and in this case the fisherman is the disturbing element—comes in you will destroy that balance, but if that element is taken away the natural balance will be restored and there will be abundance.

Mr. Keyes: I would like to ask the doctor another question. Referring to

the reproduction of the fish, what difference does it make whether you catch the fish two days before the law says not to, and just as the fish are getting ready to spawn, or catch him the day he has begun to spawn? You have destroyed the eggs in the fish just the same.

Dr. Sweeny: The difference is this: if you stop catching fish there will be all those you do not catch left to reproduce.

Mr. Keyes: That is true.

Dr. Sweeny: That is just the difference—there is no more or less.

Mr. Keyes: There is not any difference if you catch a she fish; whether you catch it in season or out you destroy just so much reproduction.

Dr. Sweeny: It is a question of numbers, whether you want part of the breeders left or not.

Mr. Keyes: Is it not a settled fact that catching the fish in the spawning season is the occasion of their decrease?

Dr. Sweeny: I think, undoubtedly, it is. If you kill a setting hen before she hatches her eggs you destroy the brood.

Mr. Keyes: Don't you kill it just as much if you kill her before she is ready to hatch. If you catch a she fish with the eggs in her just a week before she is ready to spawn, or before the close season commences, you have destroyed that many fish just the same as if you had caught her when she is ready to spawn.

Dr. Sweeny: The difference is that in one case you stop killing and in the other you keep on.

Mr. Keyes: I will admit that argument; certainly if you stop killing there will be more left.

Dr. Sweeny: A farmer does not eat all his seed wheat, he retains enough for the next crop, and that is simply what we are asking the fishermen to do, to save enough seed to insure another crop. If you kill the gravid fish, the race is extinct.

Mr. Keyes: The point I was trying to make is this: in Lake Superior you fish the entire season from the opening of navigation to the close, do you not?

Dr. Sweeny: When they can.

Mr. Keyes: Not when they can, but they do. They catch just as many fish in October or September as they do in November.

Dr. Sweeny: Yes.

Mr. Keyes: They catch them in July or August as well as in November.

Dr. Sweeny: They catch all they can.

Mr. Keyes: In no other lake is that so.

Dr. Sweeny: I understood you to say they fished all the year around in Lake Erie.

Mr. Keyes: They do not catch white fish, except in a few gill nets, in Lake Erie.

The Chairman: I think the ten minutes is up.

Mr. Post: Mr. Chairman and Gentlemen—It has occurred to me that there is room here for a compromise. Now of course, I agree with a good deal that Mr. Keyes has said with reference to the interest of the fishermen. A fish, of course, is good for nothing until he is caught, and the purpose of raising fish is to raise them for food. The matter of limitation should be such a reasonable limitation that it will insure the natural increase of the fish as well as protect the work of artificial propagation. Mr. Keyes has said, and I believe it is a fact, that the run of herring precedes a little the run of white fish or the heaviest run of white fish, and it occurs to me that if a compromise were made upon a close season and the fishing during the spawning season was not entirely stopped it might be best. Suppose the close season commenced on the 15th of November instead of the 1st. The heavy run of the herring is by that time practically over, so that it would not interfere with the herring fishing, and would result in great benefit to the white fish.

I have no doubt it is true that the conditions upon the upper end of Lake Erie are somewhat different from what they are on Lake Superior. Nature affords a large protection to spawning fish in Lake Superior. The storms that prevail there hoist the pound nets out

before the spawning season is over, and I know it is a fact and has been so for many years there, that it is very difficult for the people engaged in white fish hatching to get eggs enough there on account of the storms. It occurs to me that if a close season in such waters as Lake Michigan, and possibly others of the same character, were divided to make a compromise between the fishermen and the people on this subject, we would get something that both parties could act under, and that would be a compromise that would perhaps get the support of the fishermen.

I appreciate what probably we all do, that ordinarily it is best to get something which can be enforced than to get an ideal law which is never enforced. It will be very difficult, as Mr. Keyes has said, to pass any law in any of these legislatures of the states that border on these great lakes where the fishing industry is as large as it is, that would not be extremely detrimental to their interest. If you undertake to do more than you can accomplish, you are wasting your efforts. Now, it is very desirable, particularly for us in Michigan, and I presume it is so with the other states where large fishing industries obtain, to get an enforcement of a protective law that will have the support of the better class of fishermen. Now, it seems to me it is better to attain to something which shall answer the purpose to a limited extent than to aim to get an ideal law which will not have the support of public opinion and of such public opinion as the fishermen themselves will be able to aid in forming, and it has occurred to me that possibly a close season which will extend from the 15th of November on, would be a reasonable protection, even in Lake Erie, to the white fish, and would not interfere seriously with the herring fishing.

The other suggestions that were made by Mr. Keyes with reference to a law which will prohibit the taking or having in possession or transporting, or of dealers holding for sale fish beneath a given size, which shall be agreed upon—and I think we shall have some difficulty even in agreeing upon that—will be a great aid in obtaining a law which will meet the support of the fishermen. There is no doubt in my mind from the experience I have had with the better class of fishermen and those whose support would be more valuable, that they are going to see this matter somewhat in the light we look at it, and they appreciate the necessity for something being done in the way of prevention of destructive fishing. Many of the other suggestions which Mr. Keyes made might meet approbation—the limit to the extent from the shore that fishing should be carried on, leaving an open passageway so that the fish could get to their spawning grounds, but it seems to me that something in the nature of a compromise on this basis might, perhaps, be reached by a conference committee.

Mr. Bowman: Mr. Chairman and Gentlemen—The representatives of the State of New York are, perhaps, not largely interested in this question. Our lake is separated from your lakes by a border which makes it very different. We are propagating white fish now in our state and will hatch fully 15,000,000 this year, but as a general proposition in fish and game—and you see it illustrated perhaps better in game than you do in fish—unless there is a close season, and unless they are protected in that close and breeding season, they are soon entirely destroyed, I do not care what it is. There is no artificial propagation of game, and the only thing that is left for the game in this part of the country today is simply to protect them in the breeding season. It seems to me as though that general proposition must be true in everything, must be so with fish as much as it is with game or anything of the animal kind, I care not what.

Now, it seems to me, as has been suggested, that we should have some protection. I don't know whether the gentlemen from the State of Ohio or the fish-

ermen would be willing to see the entire business destroyed. If they cannot take them in November they cannot take them at all they say, but I believe that the fish should be protected and that they would increase and the fishermen would take more if they were. I think it is for their interest certainly as much as it is for anybody's to do that which will produce the most fish and give them the greatest gain. That is the object we all want to accomplish. Now, if it is necessary, we should make some compromise, for it seems to me very essential that there should be something done to allow these fish to reach their spawning grounds.

Our Canadian friend says, I believe, they reproduce themselves and that artificial propagation is rather an aid than the first cause, and it seems to me as though we ought to reach some compromise which will enable these fish to reach the spawning grounds and cast their spawn before being taken.

We have the same difficulty in the Hudson River. The shad run up the Hudson River to spawn, they are there at no other season, we get them in the spring. We have this same difficulty with the fishermen, and we had a fight of one or two years until we could get one or two days of open season whereby the shad could reach the fresh water at the upper part of the Hudson where we could get enough ripe shad to take the spawn from. We contended for a compromise between the fishermen and the people, and if they had not seen the necessity of allowing the ripe fish to get from the sea to the fresh water when they were ready to spawn, we would not have had any. We used to catch them at Troy but now you see very few as high as Albany. Our stations are all located below Albany and we have had great difficulty until we had a day or two open. We thought it was not the proper thing for fishermen to fish on Sunday, so we went to the Legislature on that ground, putting it on a moral ground that the fish should have Sunday, as the fishermen needed it, and so they stop fishing every Saturday night at 12 o'clock until Sunday night at 12 o'clock, and that gives the fish an opportunity to go up and get on the spawning ground where they are ready to spawn.

Take the Connecticut River; you hardly see a Connecticut shad in the market. They have been entirely fished out and they have never been reproduced. That river runs through two or three different states and one state is selfish about it and says, "I will not pay the expenses of a hatchery for the benefit of some other state," and you hardly hear of a Connecticut shad in the market. It may be from some other cause and some other reason, but these facts are true, and it seems to me that it is to the interest of fishermen as well as for everybody, that we should have some kind of a close season, and give these fish an opportunity to cast their spawn when they are ready to do it. They will not cast it at any other season; they will spawn in the fall when they are ripe, and at that time it seems to me they should certainly have a part of the spawning season, and the more the better, to get onto the spawning ground and cast their spawn and reproduce their kind.

I am very glad to see the fishermen take an interest in this matter. I am very glad for the suggestions made of throwing the young fish back, I think it will be of great benefit and I think it will increase the supply very much. It is a very judicious thing also to leave the channel open so that they can get up to the spawning ground as suggested, and if we can reach some compromise—and there seems to be but very little difficulty except with the gentlemen from Ohio—that will be satisfactory to them and give these fish some opportunity to cast their spawn upon their spawning grounds, I believe in the end it will be a great deal better for the fishermen. Of course the people cannot get these fish unless they are caught, but what is for the interest of the people is for the interest of the fishermen. We are all agreed upon one thing, that we should hatch and protect and increase the

supply of fish as much as possible, the greater the quantity the better everybody will be pleased and we must not all be too selfish, we must not want it all ourselves, we should be willing to give and take, and if we cannot get a whole loaf let us take a half loaf, and let us make a compromise between the fishermen and the people as has been suggested, say the 15th of November, and to stop fishing after that. It seems to me that after discussing this matter properly we can reach a compromise that would be satisfactory and just to all concerned, and we could pass laws in these different states that would be uniform, and that thereafter you will certainly have a much better supply of fish than heretofore.

Dr. Sweeny: If I am permitted to read a letter I would like to; it is in response to some inquiries from our vice-president.

The President: I think you have the consent of the conference.

Dr. Sweeny: There are some points in this that may be of interest. It is from Mr. Turner, a man largely interested in the fish trade. He says:

"You ask a few points on the white fish industry. We find that the supply is not equal to the demand, nor are there as many fish by half as there used to be a few years ago. I am not conversant with all the points on Lake Superior, but at Ashland, Bayfield and Duluth and vicinity it is immediately under my management. Would say Ashland Bay may be called the white fish breeding ground, also at the end of Lake Superior, near Duluth, on the south shore and along Minnesota Point net fishing should be prohibited, as they use too small meshes and catch a great many small white fish before they are of marketable size, and by this destruction prevent them from maturing. Would also suggest that Minnesota Point and the Wisconsin side of Lake Superior, near Duluth, and the whole of Ashland Bay be protected by a three-mile limit, and no nets should be set within three miles from the above shores, on the breeding grounds of the white fish in that vicinity.

We find that fishing has not been profitable for the last three or four years "(he might have said ten)" within 30 miles of Duluth. The growth of the cities of Superior and Duluth may possibly impregnate the water, and with the small mesh nets that have been heretofore used be the cause of this great scarcity. I regret very much not being able to be present, but Mr. Timberlake will explain that it is a physical impossibility for me to be there. We sincerely trust that in your deliberations something may be accomplished for the protection of this great industry."

I will state that Mr. Turner is very sick and has been for some time, or he would have been at this meeting.

The President: I will ask the Secretary to read a portion of the letter of Mr. Mr. Booth, who is largely interested in the fishing business, upon this point now under consideration.

The Secretary: Mr. Booth says:

"In reference to the small meshes of pound nets and gill nets, which I think do more to destroy the fishing interest of the lakes than anything else, I do hope we may profit by the better observance of the laws in reference to the protection of fish and game enacted in Canada, or rather the enforcement of it. I should very much like to see a more cordial feeling existing between our country and Canada in reference to a uniformity of fish laws, and trust that from your deliberations much good may result.

I am sincerely yours,

A. BOOTH,

President of the A. Booth Packing Co."

The President: Gentlemen, we have with us to-night a man who was connected for a number of years with the Michigan Fish Commission and who was instrumental in drafting the original law that set some restraint upon fishing. He gave the subject a very great deal of attention, and I know that he has the matter now just as closely at heart as he had at the time he was on the commission. I would ask Mr. John H. Bissell to give us an expression of his views upon this matter.

Mr. Bissell: Mr. Chairman and Gentlemen--Although for two years out of

the harness, I have not lost any of my interest in the subject of the propagation and protection of fish and the extension of the fisheries. I listened the short time I was in this afternoon with a great deal of interest to what was being said about Lake Erie. My own studies on this subject led me a good while ago to the conclusion that the first thing we needed was a way of enforcing such laws as we could get, and in connection with the enforcement of the laws to give a careful study to the condition of the fisheries in the different waters of the great lakes.

Something has been said this evening about a uniformity of laws. It is possible you may get uniform laws for Ohio, Michigan, Wisconsin and Minnesota, but I doubt if the uniformity could go very far. The conditions of fishing in the different seasons in the different waters are different. Now, what the gentleman from Ohio said about the fisheries at the upper end of Lake Erie demonstrated to me that it would be unfair for the fishermen to make the same regulations for the fishing east of Cleveland that are established for the fishing in the west end of the lake—the upper end of the lake—if all fisherman are to have anything like a fair chance at the fishing.

While some of us know a good deal perhaps about fishing in certain localities, I am quite satisfied that none of us know enough about the varying conditions in all the waters of the great lakes to be able to sit down at a table and prepare what we would be satisfied was a satisfactory and just law, say, with reference to the sizes of the meshes of the nets, a law with reference to the time when fishing should be permitted, and possibly with reference to the size of the fish. With reference to the size of the fish probably we could get uniformity better than in any other one particular. The state should pass such laws as they can get, not trying to get, as Mr. Post has said, ideal laws. Of course you cannot get perfect laws all in a hurry. If you could get a law that would regulate the size of the fish and at the same time a law that would regulate the meshes of the nets, with discretionary powers lodged in some intelligent officer, who would be under proper supervision, I think you would get the best results.

But before you could get a law that any one of us would be satisfied with, there must be a study of the conditions of the fisheries in the different waters. Take such a state as Michigan. A law that would be answerable for our Monroe coast of Lake Erie, I am satisfied would be entirely unsuited to the conditions about the Straits of Mackinaw and the south shore of Lake Superior. In order to get that information, officers who are enforcing laws for the states ought to be furnished with some means of acquiring and preserving useful and necessary knowledge on that subject. It is a pretty broad subject, and I am conscious that I am only touching on fragments of it here and there. It is a matter that I spent a good many winter evenings on when it was my duty to be studying such matters, and I can only, in a very fragmentary way, make suggestions here this evening. One of the most important that I can make is that each of the states should try to get wardens or other officers, it makes no difference what you call them, who would have some sort of discretion in permitting the use of nets of a small mesh at a time when it would not result in the killing of white fish. Take, for instance, the upper end of Lake Erie. If fishing is permitted in November in those waters, it would destroy no small white fish, it would hurt no small white fish; there would be no small white fish there to hurt. The thing that could possibly be accomplished is first to get the officers to enforce such laws as we have; second, to have those officers furnished by the state with means to acquire the knowledge that is necessary for the establishment of just, fair and reasonable regulations.

I should like to go over the subject of the regulations of the fisheries by way of licensing. I became satisfied from

my examination of the subject that that is one of the things that ought to be kept in view all the time. The time has got to come when the industry of fishing will be licensed, and the time ought to come when the amount of fees and revenue that would come from the licensing of the fishing in its proper regulation would defray not only the cost of enforcing the laws, but also the cost of such necessary propagation as the states found necessary to conduct.

Mr. Hampton: Mr. Bissell has touched upon a question that lies more particularly within my field than that which has been under discussion. I would not of course assume to discuss the question of propagation of fish. That is out of my line, and all that I might say upon the matter which is really under discussion would be in the nature of a question.

It has been suggested to me by Michigan fishermen, and on account of my location at the headquarters of one of the principal fishing firms upon the lakes, I have had some opportunities of learning something about the matters you have talked about—it has been suggested that one of the best ways of accomplishing this object you are all aiming at, would be to prevent the setting of nets in a certain depth of water, following out as I understand it, somewhat the plan that is in vogue in Ohio, as stated by Mr. Keyes of that state. I believe that in the waters adjacent to our state (Michigan) that would be practical, because our lakes are such that you cannot wade across them without wetting your pants, but I do not know how that would be in Lake Erie, whether the same laws that would be applicable to Michigan would be applicable there or not. I would simply throw out that suggestion, that the gentlemen, in considering the resolution, would say whether or not the taking of fish upon their spawning beds could not be prevented by some provision in regard to the depth of water at which nets should be set, as well as having a close season.

Now, in regard to the matter suggested by Mr. Bissell, as to what should be the first thing done, I must differ slightly with him, and I speak from experience when I say that the first thing is not to get the officers to enforce the law, but to get the laws, or you cannot enforce them. With the laws as they are in Michigan, and I speak from experience, under the very best system of wardens, under the very best paid officers, it would be utterly impossible to enforce them. We had ostensibly laws regulating the size of the mesh, and yet by some oversight, by some blunder, every time that these laws have been amended, they have included that same clause that the nets now in use may be permitted. I just refer to that as one thing.

Mr. Bissell: It was not an oversight.

Mr. Hampton: I suppose the idea was, there was a constitutional question involved there, that they could not take property now in use. I suppose that was the idea. If that was the idea it nullifies absolutely any enforcement of that law. That is an illustration of the fish laws, and many of our game laws are so frail that it is utterly impossible in Michigan, until these defects are corrected, to have an enforcement of most of them. So I believe the first thing to do is to have the laws that can be enforced and then I will say, have a system of wardens that you all agree upon to have those laws enforced.

Mr. Wilmot: I beg to intrude again for a few minutes, particularly in regard to the remarks that came from Mr. Bissell. His view would seem to be to establish a sort of sliding scale for the close season for fishing.

I may say to you that I have constructed fourteen hatcheries in the Dominion of Canada, from the Atlantic Ocean to the Pacific, and my experience of twenty-five years proves to me beyond any doubt that there is a very little variation with regard to the spawning time of the salmonidæ in that great extent of territory. We have taken white fish in Manitoba, white fish in the Georgian Bay, white fish in Lake On-

tario and at other points, and we do not find beyond three or four days' difference of the time in which the great spawning time takes place. We have salmon hatcheries extending from the Atlantic Coast to the Pacific and we find but very little deviation, not beyond a week or ten days, of all the eggs we gather for our hatcheries. We have salmon trout that we gather in Georgian Bay, along Lake Ontario and elsewhere, and, in fact, it only deviates a few days in regard to time when the eggs are perfectly ripe for impregnation.

So under those circumstances the Dominion Government has thought proper to select a period which will cover all the locations between the Pacific and the Atlantic as far as a close season is concerned. They find that the salmon trout and the white fish will be covered by a close season taking in the month of November. That also includes herring. If you are going to give a part of a season, eight or ten days, it will amount to nothing, because they do not spawn in that time. Some fish are a little further advanced when they approach the shores for reproduction than others, and you must get a certain limit in which you cover the greater proportion of the spawn, and our experience of some twenty-five or thirty years shows that the month of November will cover the period of spawning of the white fish in the northwest territories, in Manitoba, in Georgian Bay, in Lake Huron and in Lake Ontario and elsewhere where we have been manipulating fish. The consequence is that I think if you wish to have a variable period, you will not be carrying out what is correct with regard to the protection and propagation of your fishes. Take only one limited period of time and that will cover two or three of the more important species and let that be kept thoroughly and efficiently and you reach the point which you are aiming at; but, to have a sliding scale with regard to a close season, having one time in one state and another in another, to my mind would be a fallacy and amount to nothing whatever.

Mr. Osborn: Mr. Chairman and Gentlemen of the Convention—We cannot get, sometimes, home rule when we want it, and it is not policy for this convention, I think, to ask of the legislalatures of the states to enact laws which will stop the fishermen from fishing in November. I do not believe one of them will grant it. You will get nothing. In our state we have shortened the time to thirty-five days for shooting quails and we have done it gradually. We commenced with sixty-five days and there is scarcely a sportsman in Ohio to-day who would be willing to grant an extension of the time, for they find that in the thirty-five days of open season we have an abundance of game, and it is not possible for them to reduce the quantity of game by shooting.

If we could have five days, say at the close of the season before the fish quit spawning, with no nets at all, we would have a great quantity of fish spawned, naturally. As Mr. Bowman has shown, one Sabbath day or two Sabbath days of the shad season in New York gives plenty of shad from which to take the spawn. The shell fishermen of New York and Connecticut have hit upon a plan for the preservation of their shell fisheries that is a perfect success, and the shell fisheries of the Chesapeake Bay will have to come to the same—the leasing of grounds upon which the shell fish grow and are produced. We will have to come to this upon our lakes, the leasing of the fishing grounds, for only upon leased grounds do we reach that enforcement of observance of law which will make the fishing perpetual. We have the decision in Ohio of some of our best lawyers, showing that this is constitutional and that it is in the power of the state to lease the fishing grounds. Now, you can see that leases could be executed in such shape as to put the conduct of the fishing, the ways for the fishing, the days for the fishing, altogether in the hands of the officers having it in charge,

and this settles entirely and altogether the whole question. Canada, under the common ruling as given by our own lawyers, can do the same thing; they can lease their fishing grounds, and this will prevent the trouble.

Mr. Wilmot: They are doing it now, sir, and always have.

Mr. Osborn: That only goes to show we can do it too, but upon the opinions founded upon general law and good reason, it can be done upon both sides of the water, and I think if this convention will consider the feasibility of leasing and its desirability, and recommend that, we will do a great deal, but I believe if we ask the state legislatures to prohibit fishing during the month of November, we will accomplish nothing. We may accomplish a good deal upon the other hand. This matter has been considered by our fishermen and there are a great many difficulties in the way, but they are principally selfish difficulties, that is, difficulties between the fishermen and the location of their nets, but if they do not do something they will have no fish to catch after a short time.

The Secretary: Mr. Chairman and Gentlemen—I have been listening to the remarks made this evening upon this subject, and I must say that it is a very deep and very knotty subject to settle. I think we have lost sight of one thing that was recalled to me by the observation of Mr. Booth in his letter in regard to meeting our neighbors across the water, the Canadians, and we should bear in mind that their territory covers the entire north shore of our inland great lakes and that they have not only passed these laws of close seasons, but they have gone still farther and appointed a committee this last fall for the purpose of conferring with the people of the United States in reference to these great lakes and the fisheries. Now, the thought has occurred to me that after all our discussion, it does not seem possible for us to agree, and as Mr. Bissell has remarked, this is a matter that requires a great deal of study. I think that six of the states bordering on the great lakes are to-night represented. Three of them are not represented, Pennsylvania, Illinois and Wisconsin. Considering the importance of the matter, and the many questions arising to be settled and interests to be considered and subserved, it occurred to me whether it would not be better for this meeting to appoint a committee empowered to draw up a petition or a request to be sent to the governors of the states bordering on the great lakes, stating the importance of the subject, and the fact that Ontario has appointed a commission, for the purpose and ask those governors and their legislatures to appoint a commission to meet with the Ontario commission and take evidence and examine into this subject. Then they could report back to their different legislatures the legislation that they deem best and wisest to enact. Do you not think that by that we would arrive at a wise solution of the whole matter? Would it not be better than to go to the different legislatures and get enactments that would not agree? It seems to me that to accomplish anything we have not only got to get at the thing correctly before we go to the legislatures, but we have got to get some unformity, and then besides all that we have to go there with a sentiment behind us that will carry us through. Such a proposition coming from such a commission, representing Ontario and all the states bordering on the great lakes, after plenty of study and consideration and testimony from parties interested, would be a step toward the settlement of the whole question. I merely make that suggestion as it occurred to me after hearing the remarks of you gentlemen. I think we ought to meet our Canadian brothers half way and show them we are interested in these fisheries of the great lakes.

Mr. Andrus: It has been the idea of the Minnesota commission that the time is not far distant when we will have to do as our Canadian friends do and lease the grounds. I fully agree with the remarks of the gentleman who has preceded me, Mr. Amsden, that it would be

wise first to have a committee appointed to draft a petition with such a request as he suggests. Speaking for the Minnesota commission, I believe we would fall in with that very quickly.

Mr. Wilmot: I wish to say something with regard to the leasing of the fisheries. The Canadian Government both leases the fisheries and grants licenses, and each of those leases and licenses always have in them the statement that the close season shall be observed so that the leasing of the fisheries or anything of that kind will not interfere with the system we adopt in having a close season.

Dr. Sweeny: It seems to me, gentlemen, that the closer we are to the lawmaking power the better. I do not know what influence your governor may have on the legislature here in this state, or in any other of the states, but in our state a respectable committee can do more with the permanent standing committee toward maintaining the laws than the governor.

I think the surest way for us to do is to talk to these gentlemen like brother Keyes and show them that we are honestly and earnestly working in their interest. It does not make a cent's worth of difference to me who catches the fish. I would like to see you catch twice as many fish as you did before, but I honestly and earnestly believe that the way to do that is to preserve the fish by a close season and give them a chance to reproduce themselves, and we will supplement the natural process by fish culture. And if we can convince you that we are working in your interest, which I honestly think we are, and you would join your efforts to ours, there need be no contest; we can have these laws passed and the fish will be preserved, and you will get the benefit, not the fish commissions. We will get no benefit; it is our fellow citizens who are making their money by catching fish. We only ask you to join us in the effort to increase the fish business, your own business; it will not make a cent's worth of difference to any fish commission that I know of, but we are sincerely working in the interest of those who are making money out of catching fish, and I think if we can get together and show that there is no antagonism between the fish culturists and the fish catchers, the matter may be settled without any difficulty.

It is my earnest desire that such a meeting of these committees to be appointed will be brought about, and that we will formulate something that may lead to proper legislation, which will conserve and preserve and extend the benefits that the fishmen are getting, and not only they, but through them the whole people will receive the benefit of it. That is as I take it, the whole of the matter, that we wish to preserve the fish we have instead of letting them be extinguished. To increase the supply, and that increase inures to the benefit of those who have their money invested in the selling and catching of fish. It seems to me that if we can come to an understanding with each other that there is no antagonism, it will be seen that we do not wish to oppress any man's business. I am sure all the fish culturists that I know would like to see them catch tenfold what they are to-day. That is the whole object of our efforts, and has been for years, and as I say, if we can come to an understanding with each other and show you these things, I think your business and your interests will be subserved beyond any other. We have been receiving this opposition from the fishermen for years, and at first it was ten times as pronounced as it is at the present time, and I feel encouraged. At first they were not willing to allow us to take the eggs, and now they gladly assist and do everything they can, give us room in their boats to take the eggs, and are glad we are doing it, and this last year the only jealousy I have seen on Lake Superior was because we did not have a man with each boat that went out.

Mr. Huntington: Mr. Chairman, as I understand, this is a conference for the purpose of considering certain questions, and the first question before it for con-

sideration is in relation to protection. The one now under consideration is, as I understand it, should there be a close season for white fish?

It appears to me there is a very great difference of opinion upon the subject here, and it seems to me that it is an abstract question which we have before us to be considered. I have listened with a great deal of attention to the arguments of these gentlemen from their various standpoints, and while we are not a legislative body, and not responsible to our legislatures, yet it might lead to a good deal of benefit if we could agree upon making a uniform recommendation, and I will make the following motion, that it is the judgment of this conference that there should be a close season.

The motion was supported.

The Chairman: The motion is now open for discussion. We have not heard from Mr. McDonald, and as he represents the Buffalo Fish Company, we would be very glad to hear from him.

Mr. McDonald: I think that first question should read, Should there be a close season for herring, instead of white fish? I think the white fish are all out of Lake Erie, and it is the herring we are after now. We have made up our minds that there should be a close season for the fish. We believe that everything should be taken out of the water on the 15th day of November, every net of every description. We do not believe at all in having a close season in the spring of the year. We think the pickerel is a fish that should be cleaned out of Lake Erie. We claim that they consume more herring than their own real value amounts to. There is really no money in the fish.

Dr. Sweeny: May I ask what fish you mean by pickerel?

Mr. McDonald: I mean the wall-eyed pike. We think a good deal of the Canada laws, in the way they stand now, and I suppose the dealers on this side will have some prejudice against us on that account, for the reason that we get a great many of the Canada fish. We think that the Canada laws, modified a little bit, taking that spring close season out of them and having a close season for everything in the fall of the year, would do a great deal toward replenishing the lakes. There was a letter read from a gentleman a few minutes ago which stated that the white fish were apparently cleaned out. We are having more white fish to-day than we ever had.

The Secretary: Where do they come from?

Mr. McDonald: From Canada, from Lake Erie, Georgian Bay, Superior and Manitoba.

The Secretary: You do not get any from Lake Erie?

Mr. McDonald: We get our share of them.

The Secretary: Are there any caught in your nets?

Mr. McDonald: Yes.

The Secretary: What part of the year?

Mr. McDonald: We catch them in November and October.

Mr. Keyes: Were there more white fish this fall than last?

Mr. McDonald: Yes.

The Secretary: You say you catch white fish, at which end of the lake?

Mr. McDonald: Both ends. We have fisheries at both ends of the lake.

The Secretary: On the American or Canadian side?

Mr. McDonald: Both sides.

The Secretary: You get white fish on both sides and at both ends of the lake?

Mr. McDonald: Yes.

Mr. Wilmot: During the close season?

Mr. McDonald: No, sir; we never violate the close season of Canada. You know better than to do that, and that is one reason why we admire the Canadian laws. When they say you have to do a thing in Canada, you have got to do it. We tested that this fall on the herring, and they gave us orders to stop fishing, and we stopped.

Mr. Post: I may say so far as the Detroit River is concerned on the Amerside, that all the fish caught were caught by the Detroit Fish Commission, and

they answered a useful purpose in furnishing spawn for reproducing fish. We caught all the fish that were caught on this side of the river this season and practically all that have been caught for several years.

Mr. Wilmot: I might state for the information of the conference that it is the same case with Canada, all the fish caught on the Canadian side of the Detroit River were caught by the government nets this year.

Mr. Keyes: In regard to this question of a close season, I will say we cannot make a law in Ohio which will close one part of the lake and leave the other part open. If we make a law it has got to be for the whole state.

The Secretary: What are you going to do with Pennsylvania?

Mr. Keyes: Pennsylvania, of course, is left out. Many of you are laboring under a decided mistake so far as the the fishermen are concerned. There are no people on the face of the earth who are more anxious to keep up the fish supply of these lakes than the fishermen engaged in catching them for commerce.

The question of a close season is not a new question. You take the matter of the shad that Mr. Bowman talked about in the Hudson River. I would like to know when he would take them if he did not take them in the spawning season, that is the only time.

Dr. Sweeny: That is because they do not live in fresh water.

Mr. Keyes: The trouble with the close season in Lake Erie is that you want to take the very month when we can catch the fish.

Mr. Post. We propose to divide it.

Mr. Keyes: I am not talking about the time at all; but you take the only time that the fishermen can take the fish in paying quantities. If you could prove that by the close season of the month of November, you would replenish the waters of Lake Erie, you might have an argument, but I doubt very much if you could substantiate that.

Dr. Sweeny: There is Canada, that is a sample.

Mr. Keyes: It is not at all parallel to the State of Ohio on the fish question. If you catch a she fish before it has spawned, you destroy the spawn just as much as if you wait until the spawning season and get it.

Mr. Wilmot: You say there is no possibility of destroying the fish for spawning purposes?

Mr. Keyes: No, I do not say that. What I mean is this: If we can leave enough ground, if the fishermen will not lay their nets so that the fish cannot get to their spawning grounds, your supply of fish will be kept up.

Mr. Harris: I do not think sufficient stress has been laid on the question as to whether white fish are fit for food at the time we propose for a close season, that is, during the spawning season.

A circumstance occurred in 1885 in England, during the period of the great Fisheries Exhibition, while the Chinese deputation were over there. They were surprised at the scarcity and price of fish in England. In their own country, which is the most densely populated country in the world, there are cheap fish and fish for everybody, but is is their religion which keeps it up. While the Chinese will eat rats at any time, it is their religion not to touch a fish in the spawning season. They look upon it as poison, and the fact remains that in China, probably more than in any other country, there is a superfluity of fish, and fish for the whole population. It is not at all improbable if we go on in this country catching our fish out of season that we will have to learn what it has taken them a thousand years to learn, that we will destroy everything. In Canada we destroyed everything; we destroyed game and fish and a good deal of the land. Everything is wasted. It seemed to come natural to destroy.

When we come to Lake Erie, the lake I know most about, I know just how much destruction has taken place there. When I was a young man it was one of the finest white fish lakes in Canada, and you can imagine what the rush of white fish 48 years ago was that came up

the Detroit River to spawn and for nothing else. You destroyed them and they are gone. In Canada, in the position in which I have recently been placed, though only temporarily, it occurs to me that we hold our fisheries in trust for the people.

The Chairman: That is right.

Mr. Harris: To see that they have for all time a supply of fish; that the country is not deprived of this fish.

Mr. Keyes: I would like to ask you if you think it is right to catch a fish in a gill net?

Mr. Harris: I look upon the seine as the worst of all nets; I look upon the gill net as the next worse, and I look upon the pound net with a proper mesh as the proper way to catch fish in our lakes.

Mr. Keyes: That is right.

Mr. Harris: I believe there are more fish destroyed in the Georgian Bay, carried away in November by gill nets, than are ever brought ashore.

The Secretary: Suppose, Mr. Keyes, nothing is done in the way of regulating the fisheries of Lake Erie in the next five or ten years, what would become of your investments in your boats, twine and everything else; would it be a dead loss to you?

Mr. Keyes: I do not think that makes any difference, though I will answer that question. I am perfectly satisfied that if some regulation is not entered into, the fishing outfits in Lake Erie in five years will not be worth 5 cents on the dollar.

Mr. Harris: I have been asked what I consider the proper pound net. I suppose that is meant for Lake Erie. I can only speak for our own side, but I think the proper pound net for our side of the lake is an 80 rod lead, six or seven inch extension mesh, four-inch mesh in the hearts and three-inch in the pots. I think our herring in Lake Erie are much larger than the Lake Huron herring and considerably larger than the Lake Ontario herring. I think our three-inch mesh will just catch the proper herring, and will allow a very fair-sized small white fish to escape. That is the net I think is proper for Lake Erie, and I think it would be satisfactory to most of our fishermen.

Mr. Wilmot: Will you describe to the conference the idea that prevails with the pound net fishermen on Lake Erie as to the close season?

Mr. Harris: Our pound net men are quite willing to have a twenty-day close season, and I think you may say they are prepared for a month. There was a suggestion to make the close season from the 15th of October, but that was too much for them. They are quite prepared and I think they look forward to having a proper close season. There are very few gill net men with us and many of them have but a very small amount of capital invested, but our pound net men usually have five or six nets and their steam tugs and ice houses. Some of them have freezers, but it is not a very pleasant outlook for a man with several thousand dollars in the fishery business to look forward to that business getting worse and worse every year, and to look forward to nothing less than to have to sell out and start some other business. They are all beginning to have those views on this question, and they are all willing to listen to any plan that is suggested to improve their fisheries, so they may look forward to the improvement of their business from year to year.

The Chairman: Gentlemen, is there anything more to be said on this question? I feel, myself, that I would like to talk on it, but I shall not delay you. There has been a great deal said and I should like to have alluded to what has brought this matter to the attention of fish culturists, and to their disinterested way of looking at the matter. We have no antagonism to the fishermen, but we do feel the truth of the expression used by our Canadian friend (Mr. Harris), that we hold the fisheries in trust for the people for the future. I will not go on because the hour is too late, and if there is nothing more to be said, I will put the question.

Mr. Wilmot: I move that the chairman be allowed to proceed with his remarks.

The motion was put by the Secretary and carried.

Mr. Whitaker: In my boyhood days I lived about sixty or seventy miles south of Lake Ontario, in the State of New York, and in the winter season of the year it was a customary thing for the farmers in that community to go to Chaumont Bay, and bring back in their sleighs large quantities of Lake Ontario fish. They would bring back trout, white fish and ciscoes, and these were sold to the farmers all about that country and served the purpose of breaking up the monotony of the pork barrel, giving to the farmer a variety of cheap and wholesome food for his table. About twenty years ago I left the State of New York, and from information I have I know that within five or ten years from the time I spoke of the commercial fishing of Lake Ontario became extinct, practically. It was not pursued for profit any longer by fishermen. This illustrates what fishing without rest will do. The same thing is occurring in Lake Erie to-day, and the same is true of the fishing in the lower end of Lake Huron.

Look at Lake Huron in 1834, according to Blois' statement of its fisheries, and look at Lake Huron to-day. Blois in his Gazetteer, published in 1834, said of the locality at the Straits of Mackinac, the fish are so plentiful here that for ages they must furnish the principal article of food to the large number of people who shall settle upon the shores of these lakes. It was true, and the size of the fish was magnificent. But Blois never could have dreamed that in fifty or sixty years from the date at which he wrote there would be settled, in the six states bordering upon the shores of these lakes, one sixth of the entire population of the United States of America. He never could have dreamed that in every important fishing port upon those lakes there would be freezers of immense capacity which would make it not only possible but profitable for fishermen to fish the entire year, except when the elements drove them from their pursuit.

The fishermen say to our commission when we go to them for the purpose of gathering statistics, that year by year the meshes of the nets are contracted, they grow smaller and smaller. I have had that information from fishermen since we have been in session here, and the attempt at all times and at all places is to take fish with a gradually decreasing mesh. The result of it is that there are to-day hundreds of tons, I believe, of small white fish that are taken under the guise of herring and are sold in the markets for herring.

Another thing that appeals to us as commissioners, and we have no other interest in the fisheries except to subserve the interest of the public at large, is the fact that the work we are doing to-day, which the states engage in so willingly, is for the purpose of perpetuating this food for the people, and incidentally the fishermen reap the benefit. The trouble is that they take our fish before they ever get to a spawning age, and there comes in the iniquity of the thing. There are fishermen all through these lakes who desire some sort of close season imposed or some sort of restriction laid to prevent the waste.

These things appeal to us as commissioners. We have no interest in it except as a public undertaking. We say to the fishermen, look at this matter in the way we look at it. If you can leave in the waters these fish that in a year or two will be merchantable and of value to you, why not permit them to be left there? Why take them out when they are immature and have never come to a spawning age? In that way we lose the great benefit of our work of artificial propagation, and I say to you now what I firmly believe, that in the course of a very years if this thing goes on as it has been going on, it will all stop. I say to you fishermen that it is to your interest as well as to the interest of the public, whom we represent in this matter, that

some reasonable regulation should be imposed. I would not hear to a regulation that would drive a man out of his business, but let us have some reasonable regulation that will not permit you to take out these fish when they are immature, but will leave them in the lakes until they are marketable and of value.

As far as the white fish is concerned, it is a tender fish, and I am assured by men who know, that they are so tender that very many times in handling they are injured so they die. I cannot quite understand the idea—I may be wrong—I may not be informed, but what is the use of taking these fish in nets if you are going to put them back again? Why not leave them in the lakes? Why not so construct your nets that you will not take them at *all*, but so they will take only the fish that are of merchantable size? It seems to me that that ought to be a reasonable regulation to lay upon the fishing industries.

Let me say one thing with reference to a close season. In Canada they have the month of November closed. Their fishing is profitable. There is no complaint there from the Canadian fishermen, as I understand, that the fishing is not profitable; but the only thing they do say is that our neighbors are fishing without restriction across the border, so why not allow us to go on and do it? I am thankful to see that there is one place on God's footstool where they do enforce a law that seems to be a reasonable and just law. I wish we might do it here.

There were some remarks made here with regard to a licensing of grounds. I assure you, gentlemen, that if we go along for just about five or ten years more in this way you can license your grounds for growing celery or fresh water oysters, but you cannot license them for white fish. The fish will be gone! There will be nothing to lease. The state will have no fishing grounds that there will be any money in. There will be no temptation for a man to rent fishing grounds here at all. The destruction of the small fish is the thing, if it is possible, that we should overcome. I hope we shall get together on this and that we shall adopt the resolution of the conference committee that may report here to-morrow if the report commends itself to us. Let them report here to-morrow morning at 10 o'clock; let us have that conference committee; let us see what we can do, and I shall be very glad indeed if we can come to some conclusion. Our legislative bodies ought not to be apart from each other in the matter of regulation. We ought to be united, but it is hard to be met by the statement that no regulation will be submitted to in the matter of restriction. If we are wrong in this thing, this conference committee can come to some conclusion and submit it to us, and we can come to a determination as to what ought to be done.

Mr. McDonald: Before we close I want to say that you are wrong in thinking that we are not in favor of a close season.

The Chairman: I did not so understand your position, Mr. McDonald.

If there is nothing more to be said on this question I will put the motion. The motion is that the conference concur in the sentiment that it is their belief that there should be a close season.

The motion was carried.

The Chairman: Now, what will you do with the other resolution that was proposed, for the appointment of a committee?

Mr. Bowman: I move a committee be appointed.

The Chairman: It is moved that a Committee of Conference be appointed, one representative from each state and also representatives from the fishermen.

Motion carried.

The Chairman: How shall that committee be appointed?

Mr. Post: By the Chair.

The Chairman: Anticipating that perhaps you might want me to appoint a committee, I have prepared a list.

Dr. Sweeny: You are no politician.

The Chairman: I can see some embarrassment to Mr. Wilmot in connection with an appointment on this committee,

and yet he ought to serve on this committee.

Mr. Wilmot: I think some other gentleman had better act in my place. I should be happy to render any service I could. This is outside of the jurisdiction in which I have authority.

The Chairman: I think I will appoint Mr. Wilmot as a consulting member of the committee.

Mr. Wilmot: Is that in a medical way, in regard to seeing that the fish are not interfered with?

The Chairman: Yes, your appointment is in a purely Pickwickian sense. I will appoint Mr. Bowman from New York, Dr. Sweeny from Minnesota, Mr. Keyes on behalf of the fishermen, Mr. McDonald on behalf of the fishermen, Dr. Parker, of Michigan, Mr. Osborn, of Ohio—he has left unfortunately, I find.

Dr. Sweeny: Mr. Chairman, if my colleague, Mr. Andrus, will take my place on that committee I will be very glad to have him do so, because he is perfectly familiar with all the laws, having recently studied them, and he knows what the other states have done.

The Chairman: The Chair would be very happy to excuse Dr. Sweeny if the circumstances were not such that he cannot do so, he therefore will appoint Mr. Andrus as the other member of that committee from Ohio. I will suggest that this committee may call an informal meeting at the close of this session, so that they may have the advantage of consultation with Mr. Keyes, who I understand is going away tomorrow. I will also appoint Mr. Gould from Maine.

Mr. Bowman: Mr. Secretary, I move that Mr. Whitaker be also appointed a member of that committee.

Motion carried.

The President: Before I put the motion to adjourn, gentlemen, I want to say that to-morrow evening a number of the citizens of Detroit have prepared for your entertainment a banquet, and they expect each one of you gentlemen to be present. We shall be rejoiced to see you all.

Adjourned to December 21, at 10 a. m., 1892.

WEDNESDAY, Dec. 21, 1892, 10 A. M.

Chairman Whitaker: The conference will please come to order. The special committee that was appointed last night is not quite ready to report, and we will leave that matter as deferred business until a later period in our proceedings.

There are two or three other matters that we can take up for consideration, and among them I would call your attention to the fact that the Minnesota commissioners issued a call for a meeting of the commissioners of Wisconsin, Minnesota, North and South Dakota and Michigan the 14th of this month, to which, I presume, many of you gentlemen were invited. I had to decline attending the meeting myself on account of business engagements, but I wrote to Mr. Andrus, who called that meeting, that we would be very glad to learn the results of their meeting and invited him to be here. If it is the pleasure of the conference, I will ask him to give us a resumé of what was done there.

Mr. Andrus: Mr. Chairman and Gentlemen—As your chairman has stated, we had our conference and we had as representatives there, gentlemen from Wisconsin and the two Dakotas and Iowa. After considerable consultation, I had the pleasure of drafting a bill. It was taken up and read section by section, and adopted with some minor amendments, and the character of the bill in reference to the protection of fish and game in the different states interested was something like this:

We had a clause defining the open seasons and the methods of prosecution. That bill is to be introduced simultaneously in the different legisatures, and they are to be asked to pass it as the game and fish laws governing the different states in question.

We found there was great unformity of sentiment in regard to spring shooting. That is a matter that interests us more in those states than the matter of fishing. At the same time, the fish interests were not lost sight of. The

spring shooting clause was unanimously adopted as the sense of the meeting. Spring shooting should be abolished. A good many of our sportsmen friends feel that after having been shut up all winter, they want to get out for a little airing and a little shooting in the spring, but we were all of the opinion that that sort of butchery should be abolished.

The matter that interested Wisconsin particularly was that of trout fishing, and they there concluded to have an open season from the 1st of May until the 1st of October. We didn't take any action upon the matter of the commercial fisheries, because it seemed to us it should be left to this conference to recommend, and we would be very glad to incorporate in the bill such recommendations as are agreed upon here. We all, however, agree that Wisconsin and Minnesota should have a close season on white fish and all the fish in Lake Superior. We also adopted the clause that the committee had under consideration last night—the returning to the water of small fish taken in the open season. It has been a matter of serious difficulty in the enforcement of the laws heretofore that the game dealers of the markets who have game or fish for sale who have been arrested declare that it has been taken in some adjoining state, and they have thus been enabled to evade prosecution or conviction. So in order to get over that difficulty, we adopted a non-export clause in our bill, and we believe we have it pretty tightly sewed up.

The bill we adopted was the result of a good deal of study, a good deal of consultation over all the difficulties we have experienced in the past in the way of prosecutions we endeavored to overcome them.

Mr. Whitaker: I am sure the conference appreciate the kindness of the gentlemen representing this association in reporting to us the results of its action, and on behalf of the conference, I thank Mr. Andrus for his report.

Mr. Hampton: I would like to inquire if the bill was made to cover the entire question, or did you calculate on separate bills?

Mr. Andrus: No, sir; the entire question concerning both game and fish. I have a copy of the bill with me, so that I can tell you anything you want to know about the particuiars.

Mr. Hampton: You say you have a non-export law; have you any clause with reference to the sale of the game?

Mr. Andrus: Yes, sir; let me read that clause. "No person at any time shall catch, take or kill, or have in his possession or under his control any bird, animal or fish in this state—" We use those words, "birds, animals and fish" in every section, knowingly, and with the intent to cover it without specifying each individual or kind of birds, animals or fish. Heretofore a good many of the acts have simply said, "the birds included herein," or "the fish included herein," or "herein named," and the penalties and methods of carrying out the law have clashed somewhat. So we used those words. I will read the whole section.

Mr. Andrus then read the section referred to.

Mr. Hampton: I would inquire if you have any clause regulating the sale of the game legally killed in the state? What position do you take in regard to that?

Mr. Andrus: We permit the sale in seasons that are open.

Mr. Hampton: That would prevent the sale out of season, of course, but during the season?

Mr. Andrus: Yes, sir; that is covered.

Mr. Hampton: Is there any provision made for searching a man by the game and fish warden where there is reason to believe or to suspect a man has been poaching? Can you go through a man's game bag?

Dr. Andrus: Yes, sir; that is covered by this section "Crate, basket, locker or package to be broken open and the contents examined."

Mr. Hampton: Do you suppose that would cover a man's game bag?

Mr. Andrus: Yes, sir; we are so ad-

vised. The word "package" covers a good many things.

Mr. Wilmot: Some people have very large pockets; does it include them?

Mr. Andrus: It may be that it would not cover that, but we are advised it would cover even that.

Mr. Hampton: As a matter of fact, I have found in my own experience that when a bluff will hang all right you can go through a man's fish basket or, his game bag, but if he happens to be posted on the law you are not going to do that. I believe there should be some arrangement of this kind: if you have a law covering the taking of trout under six inches in length, I do not think you can be sure of the enforcement of the law until you have an authority similiar to the military authority exercised in the Yellowstone Park. There a person realizes he is liable to be searched at any time. When an American citizen depends upon his rights of citizenship and will not permit a search, the officer takes his own chance of searching him until he has taken out his search warrant and he is pretty secure, but if he has trout in his pocket, and you are absolutely certain of it, by the time you get your warrant he is gone. It seems to me until you get something covering that your law will be ineffective.

Dr. Gould: I would like to ask the gentleman from Minnesota if he has any clause in his law in regard to fish in transit, and if so, if you have taken into consideration the effect of the Inter-State Commerce Act?

Mr. Andrus: We permit the shipment of fish through the state, or the shipment of game through the state, from one Board of Fish or Game Commissioners, consigned to another Board of Commissioners.

Dr. Gould: I had reference to contraband goods.

Mr. Andrus: We seize them in our state, and make the owner prove they are lawful.

Dr. Gould: We have had a good deal of trouble in Maine, poachers relying on the Inter-State Commerce Act.

Mr. Andrus: We have had a decision on that point by the Supreme Court. Any game that is unlawfully taken is contraband, and is not subject to the Inter-State Commerce Act. That is the Supreme Court decision of Arkansas, Illinois, Massachusetts and Kansas. The point was raised that a man had jurisdiction over his own property by reason of the Inter-State Commerce Act, but the Supreme Courts have said the property was not his own and was not subject to the law in that way.

The Conference instructed me to have a few copies of that act printed and distributed. We adopted a fish shute clause, and we took the Illinois law bodily.

That is a matter that interests us more particularly.

Mr. Whitaker: The difficulty with fish shutes in this state is the loose way it is left to be enforced. It is practically a dead letter. It now requires a petition of twelve freeholders to the board of supervisors, and they order it in their discretion.

Mr. Andrus: The control of the navigable streams where fish are, and where dams are erected, is wholly under the control of the Board of Game and Fish Commissioners in our state, and in this bill it will be put under the same control. This bill authorizes the fish commissioners to compel the building of a fish way, and the penalty of non-performance is ten dollars a day for not to exceed 25 days for each day's omission, after the proper legal notification has been given.

Mr. Gould: We have a similar law to that in Maine, and we have found it worked very nicely. During the past two years the mill owners have volunteered to put in the fish ways.

Mr. Andrus: In Minnesota waters we have put in something like thirty-seven fish ways during the past year that had not existed before.

Mr. Whitaker: What fish pass do you use?

Mr. Andrus: We use anything adapted to the stream. We do not use any particular form. The Fish Commissioner

of Iowa, Mr. Craigs, has a plan of his own which commends itself to my judgment as being the most feasible and least expensive of any.

Mr. Whitaker: Is it patented?

Mr. Andrus: No, sir; it is not patented. The law provides that we shall not be compelled to use any patented device.

Mr. Wilmot: We have one that was introduced of late that supersedes anything we have before seen. And if any gentleman of this conference is desirous of getting the latest improvements in this line, I should be most happy to send him a plan of the same, and, if possible, to send a model.

Mr. Whitaker: Is it the Hockin way?

Mr. Wilmot: Yes; it is the Hockin.

Mr. Whitaker: And a very good one, too.

Mr. Wilmot: Yes; it is a very good one. We consider it the very best we have ever seen.

Mr. Whitaker: I will say the Michigan Fish Commission will make an application now for a plan. We are now considering the question of the adoption of a new fish-way.

Mr. Wilmot: Then I will request you to drop me a line at Ottawa, as it may slip my memory, but if you will send me a letter, I will see that you are sent a model.

Mr. Hampton: One other trouble in Michigan has been, as the chairman has related, that the law provides that the Fish Commissioners shall furnish county clerks and those who apply, drafts and plans of the fish ways, and we have as yet no plan of fish way that would be suitable to our streams. I believe that Dr. Parker, on different occasions, has made that answer to me, that they are not adapted to different stages of water. I am interested in this subject, although it is not in my department. It is left to the board of supervisors of the different counties instead of the Game and Fish Warden. In many cases a fish way would have been adopted if there had been a way the Fish Commissioners could recommend.

Mr. Sweeny: In Minnesota they have a variety of ways of making these shutes, one of which is to put in the bottom of the stream a lot of brush, and upon it erect a dam to control the waters. The fish have an opportunity to get up over that brush.

Dr. Parker: In Michigaa the difficulty has been in regard to the varying stages of water. It is easy enough to make a fish way that would run nicely enough at one stage of water. It has been successful where there has been a particular stage of water, but you come to pile on top of that, at a time when fish are running most, four or five feet of water, and you have the conditions entirely changed. On that account we haven't a fish shute that we can recommend for every case in which it might be desirable to put in a shute.

Mr. Wilmot: The fish way now constructed by the Dominion Government is a most efficient one, and is quite the reverse of what the old ones were. The entrance of the fish way is at the foot of the structure, and it empties itself up in the middle of the mill pond. The difficulty hitherto has been that the end of the pass has been way down somewhere, where the fish will not enter it, they come up under the dam, where they are destroyed. The entrance should be right by the dam itself, and they are generally placed below.

Mr. Whitaker: There is no question about that. The experience, I think, of every one who has had occasion to investigate fish ways is that the discharge end is at the wrong place. The fish will run up to the apron of the dam, and as a rule, this is quite a ways from where the fish ways usually are, and they do not get up the fish way at all. The statutes of this state provided, because they were passed something like 15 or 20 years ago—how long ago is it, Dr. Parker?

Dr. Parker: I think it is seventeen years ago.

Mr. Whitaker (continuing): That the Board of Fish Commissioners should adopt some suitable fish way, and publish a certain number of lithographed

copies, sufficient to file with every township clerk. That was done. But, as all township records are subject to so many changes by change of clerks, I presume they were lost or destroyed.

Undoubtedly at the time this fish way was adopted it was the best then constructed. It is the old Shaw fish way, but I do not think it is of any account at all. The Michigan Board of Fish Commissioners have had application from certain members of the Legislature, I think for the last three or four sessions, to suggest laws that will compel fish ways to be put in. We have taken a very small interest in the matter as a commission, because the only thing we could do was to say there is the Shaw fish way, the only one we can put in. It is of little account, and we have no means of securing another. Mr. Rogers has a fish way, I believe, that is well spoken of. I believe there is one in the Hudson River at Troy. The trouble with Mr. Rogers' shute is that it is too expensive for even the State of Michigan under any circumstances. The only places where fish ways can be put in will be where dams have been swept out and must be replaced, or where new ones are being constructed.

Mr. Wilmot: In regard to this subject of fish ways I would like to say a word, for it is a matter of vital importance with regard to the preservation and propagation of fish. The mill dams have been found throughout our country and I think, throughout the United States, one of the principal barriers to the fish going up to their breeding grounds.

I may state in regard to this pass I have reference to that it consumes less water than any other we have had experience with. The outlet at the lower end of the dam need not be a hole of more than three or four inches, and the pressure of water from that three or four inches is no greater than where it enters at the head of the dam, fifty or a hundred or, perhaps, one hundred and fifty feet further up. The fish can swim through without any obstruction whatever.

Dr. Parker: Have you tried it practically so that you know it is successful. Have you seen fish pass through?

Mr. Wilmot: The government referred the matter to me, and I said I would give no opinion on a fish shute, as I had seen so many of them that were worthless, unless I had ocular demonstration of their success. I sent an efficient and trusty man to go there and watch this pass, and he reports he saw them go up.

Dr. Parker: They might do that under favorable circumstances. The Shaw pass worked perfectly with the model we had, but when we put it in a dam where the water was greater in volume the whole thing was changed.

Mr. Wilmot: This was put in the dam itself, and was found to work perfectly. And I wish to say in this connection that Mr. Hawkins sent me sworn statements of fish wardens who had had charge of this fish way on different streams, with the number of fish passing up, so that it seems to be a perfect success.

Mr. Bowman: The special committee that was appointed last night is ready to report, and begs leave to submit the following:

DETROIT, Dec. 21st, 1892.

To the Fisheries Conference:

GENTLEMEN—Your committee, to whom was referred the question, "whether or not there should be a close season for white fish, lake or salmon trout and herring," also what means should be taken for their protection, would report:

1st. All small fish and those unfit for food of all kinds when taken in nets, should be replaced in the water where taken alive, and that fishermen should not be allowed to take such fish on shore, nor expose them for sale.

2nd. That no string pound of nets used in the lakes shall extend more than four miles from shore.

3rd. That one-half part of all channels between islands or elsewhere where fish migrate to spawn, shall be kept free from nets of all kinds at all seasons.

4th. That all white fish taken of less than sixteen inches in length, and all salmon trout less than two pounds in weight shall be immediately returned to the waters where taken and shall not be exposed for sale. That all herring less than eight inches in length, and all wall-eyed pike less than twelve inches in length,

shall be returned to the waters where taken and shall not be exposed for sale.

5th. That the month of November in each year be made a close season in all the great lakes for white fish, herring and salmon or lake trout.

Your committee would further recommend that all penalties fixed for violations of any laws that shall be enacted shall be made not only to apply to those who take fish, but also to all persons who buy, sell, transport or have the same in possession.

The 1st, 2nd, 3rd and 4th recommendations were unanimously adopted by your committee.

The fifth recommendation, making the month of November in each year a close season for white fish, salmon trout and herring was adopted, all the members voting "aye" except Mr. Keyes, from Ohio, who voted in the negative.

Resolved. That the law should authorize the seizure and destruction of nets used in violation of law.

Mr. Amsden: Was any consideration taken of the size of mesh in gill nets?

Mr. Bowman: No, that was not considered. No recommendation was made by the committee in that regard at all.

Mr. Sweeny: I move its adoption.

Dr. Gould: I will second it.

Mr. Speed: I would suggest, in speaking of the length of net, four miles from shore, that that should be amended; that when one net is set another shall not be set at a certain distance, or they will evade the law.

Mr. Keyes: I will say that my idea of the distance from shore was not to prevent fish from running, but to leave a channel open for a large proportion of the fish to pass by. I do not think it makes any difference whether you have nets set close to one another or not.

Mr. Whitaker: I do not quite understand it, and I would like to have that portion of the report read again.

The Secretary read the portion of the report as requested.

Mr. Keyes: That does not cover my idea at all. My idea was that it should not be permitted beyond a distance of four miles. I think the phraseology does not express the idea. I think the committee means that the gang should not be more than four miles long.

Mr. Huntington: I move then that it be amended to read "that no pound net shall extend more than four miles from the shore."

The motion was duly seconded.

Mr. Keyes: I understand then that the motion is to change "that all pound nets used on the lakes shall not be more than four miles in length including leaders," to read this way, "that all pound nets used in the lakes shall not extend more than four miles from shore." That would virtually prohibit all fishing with leaders outside of the four-mile limit.

The Chairman: Gentlemen, are there any remarks on the amendment?

Mr. Green: I think it would be well to designate the length of a leader. That the whole length of the net shall be four miles, and that the leader shall not be more than four miles from shore. The way it is now, a man might construct a net 20 miles long and not have a leader four miles from shore.

Mr. Keyes: It is absolutely impossible to fish parallel with the shore. They can only fish at right angles with the shore.

Mr. Amsden: Why not include gill nets in this clause?

Mr. Keyes: I am in favor of absolutely prohibiting gill netting. I will tell you that right here.

Mr. Wilmot: I think it is a very good thing that this question has been brought up. Some say you cannot fish parallel with the shore, but at the mouth of rivers and in bays nets are set at right angles to the shore, and it forms a very destructive engine for taking fish.

Mr. Bowman: I think most of the fishing at the mouth of rivers is done by gill nets.

The Chairman: The Chair is prepared to entertain any amendment, if any is desired to this report. The report now is in the hands of the conference.

Mr. Post: It is easy enough to add the clause with reference to the length of leaders.

Mr. Keyes: That is all right, but I will ask which one of you gentlemen know how long a leader ought to be?

Mr. Post: I say add the clause that the

leader should not be more than four miles long.

Mr. Andrus. I will offer an amendment that all pound nets shall not exceed four miles in length including leaders.

Mr. Amsden: Then the amendments would read, "That all pounds nets used in the lakes shall not extend more than four miles from the shore, and all pound nets used on the lakes shall not be more than four miles long, including leaders.

Mr. Keyes: I would leave that last off, because nobody ever fished with a leader four miles long, or one mile long, or a quarter mile long, hardly.

Dr. Gould: What would be the objection to it then? It would be harmless.

Mr. Keyes: It is simply irrelevant, that is all. They would think we didn't understand our business.

Mr. Whitaker: It seems to me you are embarrassing the whole thing by amplifying it. I would, however, suggest that the word "string" be put in instead of the words "pound nets."

The amendment was then put to the conference and unanimously carried.

The resolution as amended was then unanimously adopted.

The Chairman: The next matter to be discussed is close seasons for brook trout, grayling, California trout, brown trout, Loch Leven trout, land-locked salmon and small-mouthed bass. I think there is no objection to the close season now in force for all those fish, unless it be black bass. Mr. Bowman, have you any close season for black bass in New York?

Mr. Bowman: I am not certain about that. I will look it up. Yes. For black bass, or Oswego bass, the close season is between the first day of January and the first day of May.

Mr. Andrus: In Minnesota it is from the first day of December until the fifteenth of May.

Mr. Whitaker: I think we have a close season in Michigan.

Mr. Hampton: There is a close season, although they can be taken at any time with a hook and line. The only close season is in regard to spearing, and that is practically nugatory.

Mr. Wilmot: In Canada that would be perfectly useless. The fifteenth of June is our ending, but we find even that is too early. We should extend it to the first day of July. The black bass requires a longer season; it is so solicitous of its egg and of its young. The parent fish remains with its young for some time after they are hatched, hence it is my experience as a close observer of these things generally, that the close season should extend to the first day of July.

Mr. Whitaker: I want to say that, so far as the American waters are concerned, at the St. Clair Flats there is little fishing done before the 15th of June, and those that are taken are usually taken off the spawning beds, and their flesh is insipid and of no account. I had as soon have a piece of bob veal as to have a black bass that is caught, for instance, at the Put-in-Bay Islands in May or June.

They are tasteless, and if the limit is fixed it seems to me it ought to be not later than the 15th of June. Judge Speed is much interested in the propagation of fish and their protection, and no doubt the conference would be glad to hear from him.

Judge Speed: I don't know as I have anything to say in addition to what other gentlemen have said. But I think spearing ought to be stopped more than fishing by any other means. There is a gentleman here from Chatham who was speaking of fishing over in Mitchell's Bay. Similar conditions, I think, prevail on our side. Mitchell's Bay is a part of what is called St. Clair Flats, not far from Chatham. The fish run in there in water that is not more than three or four feet deep, where you can see the bottom readily at any time, and where they lay their eggs, stay there for a time, and watch them, and they go there, on our side at any rate, and spear in large numbers, because they can see them readily and get at them. They go there as early in the spring as they can go and continue spearing right along.

It ought to be stopped because the large number of those fish caught there are almost useless for any purpose. In addition to that they troll on those grounds, and large numbers of fish are caught in that way. They troll with spoon hooks and also with minnows, and they catch fish as late as July on those spawning grounds. Then they are just commencing to run off in deep water—between the 15th of June and the 1st of July. Very many of the fish are large, and I would like to see that sort of thing stopped, if it is possible, or the taking of any kind of fish on spawning grounds. I would fix the period as late as the 15th of June, rather than the 1st of June or the 15th of May, because then you would insure the stopping of fishing on those spawning grounds. Of course, in some waters you can fix the period much earlier, but in our water they spawn late in the season.

I was not present yesterday, but I am very sorry to learn that the conference adopted a resolution limiting the taking of fish by the weight rather than the size. Because I think you will find in this state, and I think too, in Canada, that all questions of fact must go to a jury, and when you come to submit that question to a jury, you will find that the weight of fish is so hard to determine that they will find in favor of the party complained of. If you fix on the size of fish you have something at which they can get at. Almost anybody can tell the length of a fish within one or two inches by sight, but not so by weight. You never have scales present, and you leave a loop hole where many people escape. If you fix the size of fish, and say that fish of a certain length, no matter what it weighed, it shall go back in the water, you fix something that will be definite, and almost any one can determine it with the eye. If you fix it by weight, the question will be asked before the jury, "Did you have any scales? Do you know anything about the weight of that fish?" And you will find any quantity of fish will go to the market on weight, where you can very readily determine by the eye on size. It may be arbitrary, because one fish of a certain length will weigh more than another fish of a certain length, but you arrive at it close enough for all practical purposes, for the purpose of conviction, and that is what you want to get at.

Mr. Hampton: I believe that suggestion is a wise one, for I have found it so in practical experience, and I think it would be well to reconsider that question and submit an amendment that will cover the weight as well as the size desired.

Judge Speed: No white fish of less than twelve or fifteen or twenty inches in length, whatever you may determine upon, and then you will have something definite upon which to go.

Mr. Wilmot: Allow me to suggest as the conference is going down to Sandwich hatchery they might have ocular demonstration of the length of fish, because there are a number of white fish there, and we might better come to a conclusion as to the right length of fish. I perfectly agree with the gentleman.

Judge Speed: You can get at it by taking a number of fish and weighing them, and then determine their length, and you will find they won't vary an inch. There is then something absolutely certain to go upon, and fish less than fifteen inches in length shall not be taken under any circumstances.

Mr. Hampton: In order to bring the matter up I move you that we reconsider the report of the committee on the size of white fish taken.

Mr. Hampton's motion was seconded and unanimously adopted.

Dr. Parker: I move you this question be postponed until after we return from our trip down the river, so that we can there determine as to the proper length of fish, unless we can determine right here. Perhaps Mr. Keyes could tell us. What we want to get is the length of the pound-and-a-half fish.

Mr. Whitaker: I will ask Mr. Craig, who is a practical fisherman, to give us some information on this point.

Mr. Craig: I should think fourteen

inches a good length of white fish; I should not think it would go fifteen inches—that is, the length of a white fish that would weigh a pound and a half.

Mr. Keyes: I think, about fourteen or fifteen inches.

Mr. Hampton: I move you then to strike out the words "pound and a half," where they occur in the resolution, and substitute "fifteen inches."

Mr. Whitaker: It seems to me it would be a very easy matter to determine the length of a pound and a half fish. Mr. Craig can do it. I don't think the live fish down there are of that weight.

Mr. Keyes: I guess there are very few Detroit river fish that will weigh two pounds.

Mr. Whitaker: Yes, we have sold our catch on the average of two and a-half pounds. We have sold our entire catch to dealers of fish, caught on the Detroit river, at two and a half pounds weight, the weight being the averaged.

Mr. Keyes: That is bigger than they catch them now.

Dr. Parker: I desire the resolution laid on the table. It would be a good object lesson; we might learn something about the weight of fish by taking some practical observations down there.

Mr. Whitaker: What would be the objection to the appointment of a committee of three to determine that question and report to us immediately upon our return. The chair will entertain such a motion.

It was moved and supported that such a committee be appointed. Duly carried.

Judge Speed: I think, gentlemen, you will probably find from experience that wall-eyed pike, of which large numbers are sent here from Saginaw Bay, and perhaps other localities, a great many of them are smaller in size, and you will have to adopt a different rule in regard to them than to white fish. You should make a difference in weight in regard to those fish as well as a difference in size.

Mr. Whitaker: It would certainly be a good idea, and another thing that escaped me at the time: it might be a question, under a prosecution, whether it was the weight of a dressed fish or the weight of a green fish. The Chair will appoint on that committee, to report at once on our return, Dr. Parker, Judge Speed and Dr. Sweeny.

Judge Speed: I don't think I can visit the hatchery.

Mr. Whitaker: I will then appoint Mr. Wilmot. The committee will consider that matter and report immediately upon our return.

Is there anything further to be done with these resolutions?

Mr. Keyes: I would like to offer an amenement to the report of the special committee. I move you that all gill net fishing be prohibited in a less depth of water than 80 feet in all waters.

Mr. Hampton: For the sake of having that so we can consider it, I support the amendment, and move that it lie on the table until the other matters come up.

Mr. Keyes: The reason I made that motion is that I did not think it would come up before this conference at all, but I am very firmly of the opinion that gill net fishing, as practiced now on all the lakes, is a great destructive force in fishing. As Mr. Wilmot here has said, he has seen gill net fishing in the protected waters of Canada, which is a fair sample of protection, and in the Georgian Bay, and when they take up those nets the fish are absolutely putrid in the nets, dropping from the nets almost as they lift them up, and on the feeding grounds where they fish, and wherever fish live during the summer, when they are not on their spawning grounds, the fish taken are unfit for market, and but a small portion of them is consumed. Their talk about one night out for nets is all right, bnt the gill nets are usually out three or four nights, and the fish that run in first are the fish that are almost decayed. In 80 feet of water I am in favor of absolute prohibition, and the gill nets should be kept off the reefs which are the spawning grounds of the white fish, herring, black bass and other fish of that kind. At present they go on these reefs and they set their gill nets across

the mouths of rivers and bays, and every place where fish run at any season of the year. The fish are practically given no rest whatever from the beginning of the season to the end. My opinion is that the gill nets are the greatest engine of destruction that we have on the great chain of lakes. Lake Erie is the last lake in the chain where gill netting is being carried on. Nearly all the other lakes had been depleted of fish before gill netting became popular, and until within the last two or three years it was confined to the eastern end of the lake. There was very little gill netting west of Cleveland. It was all done in Pennsylvania waters. The reason for this was because they could not set trap nets and catch fish in a proper way. The water is so deep and so exposed to storms and currents that only a limited amount of fish could be taken in trap nets, and consequently, they excused themselves by saying, if you prohibit our gill netting we cannot fish at all. They do not claim that the fish are fit for market, but they do go on the market, and they answer the purpose. If gill netting can be prohibited on the reefs and shoal waters, and permitting the fish to get on the reefs at the proper time, you will do more, in my judgment, towards protecting the fish in the waters of the lakes than by any other resolution you may be able to pass. I think it will be far ahead of the close seasons, except you made an absolute close season from the first day of January until the 31st day of December. Of course that would help the fish. Fish might be taken for the benefit of the farmers. They are no benefit to the people; the question is to take them when they are most beneficial to the people, and when they can be given to them in the most healthy condition. The Boards of Health of the various states have investigated this matter, and with one accord they have said that fish thus taken are absolutely unwholesome as food. I ventnre to say there is not a single dealer, either catcher or handler of fish, who will say to this association that if he could get pound net fish, he would not take gill net fish under any circumstances.

The large product of gill net fishing, especially in the Canadian waters, outside of Lake Erie, and also in the upper lakes, on the American side, until recent years, was a salted product. The markets were not open to them in the fresh condition. Consequently they took them in great numbers and salted them. They salted all kinds of fish, and the consumer was thereby deceived, as he, of course, could not know what the condition of the fish was when it was salted. He supposed he was getting a fresh article, when in fact he was getting a fish that the fisherman would not eat, when taken from the nets, on his table. There is not a man who is practically engaged in the business but what will say there isn't one fish out of ten taken in gill nets that he would eat, especially in the summer. There is a prejudice against gill net fish, and they are put on the market at the worst season of the year. They are caught in the summer months, and they are placed upon the market very seldom in good condition. The fish are constantly harassed upon their breeding grounds all summer, and I am sure that it tends to destroy fish much more than when taken toward the end of the spawning season. Of course any sort of curtailing of fishing will assist in the reproduction. I don't care what you do to aid that.

In speaking about angling for black bass. The black bass has been exterminated by angling more than by anything else, in my judgment, and I think that is the opinion of all the fishermen in our locality at least. I do not expect it will ever be possible to get laws passed which will prevent gill netting, but if you could get laws passed limiting that, it would go a long ways toward the protection of fish. As long as that system is unlimited, and they can string their nets from shore to shore on any lake, it is utterly useless in my mind, as a practical fisherman, to undertake to protect fish by making a close season of the time of

spawning. Don't understand me to say that will not help to protect fish. Of course anything that stops their catching, will help to protect them, but if you could stop gill netting on the reefs, and that is where they go to set the gill nets, especially in the spawning time, you would go a long ways towards protecting the fish. Take Georgian Bay, that is a great body of water, but I make this proposition now, that with all the protection that the Canadian laws afford if gill netting is permitted in Georgian Bay, in less than five years they will be scarcer there than they are in Lake Erie.

Mr. Craig: I did not come here to say a word, but there is one thing that has been mentioned that I am, perhaps, a crank on, and that is the fouling of our waters. I think if we in Michigan had kept our waters as clear as they have been kept in Georgian Bay, we would have white fish on the spawning grounds just as we had thirty years ago. Speaking about gill netting on Georgian Bay, there are men there to-day who I dealt with forty years ago—I met them here five or six years ago, and they have used the gill nets right along. I do not believe the gill nets are such poisonous affairs. I have sold more gill net fish than any other kind. If a fish gets foul he goes on the offal heap. I do not know whether we have laws to prevent saw dust from being thrown in the lake, but if we have they are not enforced. It is destroying and driving off many of our fish.

Mr. Keyes: I would like to ask you one question: What in your opinion has destroyed the white fish in Lake Superior? There is no saw dust thrown in the water there?

Mr. Craig: There has never been big fishing in Lake Superior, except at White Fish Point, where Booth & Company are establishing their fishing nets. I have tried fishing there. It is a very deep lake, and the only place you can set gill nets is where it comes up shoal.

Mr. Keyes: I would like to ask Mr. Craig if he would eat a gill net fish that he has hauled in, if it comes up stiff in the net?

Mr. Craig: Well, I don't know. Yes, I guess, perhaps, I would.

Mr. Wilmot: Pardon me if you please one moment. I am intruding upon you too much, but the subject that has been touched upon by the gentleman, I think it is desirable to make further mention of, and that is saw dust. There can be nothing more destructive of fish than the depositing of saw dust in the rivers and lakes. Wherever vegetation of any kind is stopped at the bottom of the water, there fish life is also arrested. In fact the origin and the production of almost everything extant is vegetable life. Upon land where there is no vegetation there is no animal life. In waters where there is no vegetation there is no fish life. If you put on the bottom of the waters a foreign substance like saw dust, vegetable life is stopped, and consequently insect growth is stopped and consequently fish life is stopped. Minute crustacea of various kinds are fed upon the juices of these plants, which feed the smaller fish, and in turn the larger fish feed upon the smaller.

Mr. Keyes: I want to beg your indulgence, as I have to go away, but if the gentlemen of this conference will take up the question of gill netting, I would like to have them ask the Buffalo Fish Co., of this city—which has a branch house here, and they are as large a fish concern as there is in the United States, and fish in all waters—I would like to ask their opinion as to the merchantable and eatable qualities of the ordinary fish that are caught in gill nets or trap nets. Don't understand me to say that all fish caught in gill nets are bad. Not by any means. The fish that is alive is probably good enough to eat, though I never saw one in my life but what was in a certain degree bloated. I would like to have you gentlemen ask the Buffalo Fish Co., or anybody that has been with them any length of time, how the fish compare with pound net fish in their business? Which fish can they sell on the market the best? Which fish carries the best,

and which fish gets to the consumer in the best shape, in their opinion as dealers in fish? They are not catchers, I believe, to any large extent. I believe they are simply buyers of fish, although they do fish, of course. If there are any other gentlemen here, I don't know as there are, who are engaged in the business, I would like them to answer. Of course, if a man is engaged in gill netting he won't admit these things. He has his money in it, but if he is engaged in both systems he will admit it in 99 cases out of a 100, and he will also tell you to what extent the gill netting from spring to fall is practiced in the northern lakes. It is not so much practiced in the waters of Lake Erie, because the waters are warm, consequently they go up north; but you catch fish in warm weather and they very soon decay when they are exposed to the sun, and that is the reason why gill netting is not practiced in the upper end of Lake Erie in the summer months.

Mr. Wilmot: I am afraid I am intruding, but when I hear arguments of this kind I feel it my duty to put before this conference the knowledge I have on this point. We have been taking the evidence of the agents of the Buffalo Fish Company on Georgian Bay and on Lake Huron, and those agents tell us they get better fish and larger fish in the gill nets than they do in the pound nets, for this reason, and it is a very rational one: The gill nets have meshes of five inches and they get only the large fish, and they find that the large fish are the more marketable fish in market than the smaller fish. There is no doubt the fish are not as sound from the gill nets as they are from the pound nets, but the pound net as now used is far more destructive than the gill net.

On motion of Mr. Hampton the resolutions before the house were laid on the table until the reassembling this afternoon.

The Chairman then read an invitation from Mr. Frank Clark, of Northville, Mich., to visit the hatcheries there, but because of lack of time it could not be accepted.

Mr. Gould, of Maine: I have drawn up a resolution here that I would like to place before the conference for their consideration on the subject of uniformity of laws.

Whereas, The different state fish and game commissions are more in touch with the laws and their defects throughout the entire state where they may hold office; and,

Whereas, Their knowledge of the general requirements in a given instance is greater than that of the laity at large; and,

Whereas, By reason of their office and intimate knowledge of the needs, they are called upon to make suggestions during legislative session;

Resolved, That in the opinion of the International Fisheries Conference it is plainly the duty of the state commissioners to make such recommendations to their respective state legislatures as their experience in the practical workings of their laws regulating the taking of fish may dictate.

Resolved, That the states are fully competent to make wholesome laws for the protection of their fish and game.

Resolved, Further, that where in any case from lack of intimate knowledge of the habits or the place in the economy of nature of any given species of fish, occupies the commissioners shall advocate such restrictive legislation as will leave no doubt as to its efficacy until such investigation has been made as will enable them to give intelligent recommeddations on the subject.

Mr. Post: I will support the resolution.

The motion was put and unanimously adopted.

Dr. Sweeny: I wish to present the following resolution:

Resolved, That it is the judgment of this conference there should be a close season for bass and that such season should be between the 1st of April and the 15th of June, and all kinds of fishing, including spearing, should be prohibited in the close season.

Mr. Wilmot: The proper season should be from the 1st of May to the 1st of July.

Mr. Hampton: There is one thing that seems to be overlooked, and that is the getting of something that the legislatures will adopt. The recommendations you pass upon will have no force with them. The Fish Commissioners know something about the efforts necessary to

influence the legislators, and I suggest that you make the close season as reasonable as possible.

Mr. Whitaker: Let me say one word in reply. If there is anything that ought to have influence with a legislature it is the opinion of this conference. It was called into existence by the authority of the Province of Ontario, and this is a continuation of those meetings. It seems to me the recommendation of the representatives of the different states, called upon to meet and discuss these questions, certainly ought to have some force before a legislature.

Mr. Amsden: I am rather inclined to think this conference had better leave that question alone. I think if we take up the fish of the great lakes here and give our attention to them we shall accomplish all we can expect. The distribution of black bass covers so much territory, and there are such differences in temperature, and they vary so in time of their spawning season, I rather think we hadn't better try to pass any such resolution. Better leave out the black bass. It is the dearest fish to me there is, and I think their domestic habits are so much to be admired that we cannot do too much to protect them, but at the same time I think we had better leave that alone.

Mr. Wilmot: Our Dominion Government covers several states, and we have taken the trouble to ascertain from these different states, which include Ontario, Quebec, Manitoba, Nova Scotia and New Brunswick, about their spawning habit, and we find there is very little deviation at all in regard to their spawning periods in the different waters. We find that the black bass, as a rule, almost invariably spawns in all these waters during the months of May and June, more particularly the latter end of May and the beginning of June. But as previously remarked this fish is so solicitous of its eggs, and its young, that it remains longer in the act of spawning and taking care of its young than any other fish, and therefore, the months of May and June should he adopted as the proper close season. I do not think you could get a better period than May and June. If you commence earlier than that you infringe on the angler too much, and if you allow them to be taken from the 15th of June to the 1st of July you interfere with the parent fish in the care of its young. I speak from an experience of thirty or forty years.

Mr. Whitaker: We will now vote on the resolution.

Resolved, That in the judgment of this conference there should be a close season for black bass and that such season should be between the 1st of April and the 15th of June, and all kinds of fishing, including spearing, should be prohibited in the close season.

A vote was taken and the resolution was adopted.

The conference then took a recess until 4 p. m.

WEDNESDAY, Dec. 21st, 4 P. M.

Chairman Whitaker: The conference will please come to order. I will ask Mr. Bowman to perform the functions of presiding officer, as it becomes necessary for me to be absent the rest of this session.

Chairman Bowman: We will now listen to the report of the committee of three appointed to report back to this conference the size of white fish.

Dr. Parker: I will report that we found in weighing the fish that one fifteen inches long weighs one and one-half pounds, and one seventeen inches long weighs two pounds. So that we would recommend that no fish less than fifteen inches should be put upon the market.

Mr. Wilmot: Don't you think that a rather small size, after all?

Dr. Parker: Yes, it is pretty small.

Mr. Amsden: Two pounds is small enough, and it seems to me as low as we ought to go, but we will have to get it through by degrees.

Mr. Wilmot: No fish under sixteen inches then, say.

Dr. Parker: Mr. Craig stated before the committee that that fish (referring to fish on the table brought from the Sandwich hatchery) was as small as ought to be

put on the market; should be the limit, in his idea. I think we ought rather to exceed the limit than to go under it, as suggested by Mr. Wilmot.

Chairman: Then do you report that the limit should be sixteen inches in length?

Dr. Parker: Yes, sir.

Chairman Bowman: Do any of you gentlemen wish to be heard on this question? The committee have reported that all white fish taken of less than sixteen inches in length shall be returned to the waters where taken, and shall not be exposed for sale. If there are no remarks I will put the question.

The motion prevailed.

Will the Secretary read the report as amended in full.

(The Secretary reads the report.)

Mr. Andrus: I move the adoption of this report as amended.

(The motion was supported by Mr. Huntington.)

Unanimously carried.

Chairman Bowman: There is one other question left to be acted upon, and that is the resolution of Mr. Keyes: "That all fishing with gill nets shall be prohibited in the great lakes in less than eighty feet of water."

Mr. Post: I have a word to say in regard to that. There was one thing that occurred to me while we were discussing it. The principal objection which Mr. Keyes made to gill net fishing (of course, he admits it is impossible to abolish gill net fishing) was, that if they fished on the waters less than eighty feet in depth they were going on the spawning grounds. We have already adopted a measure which takes that out of the possibilities, if our recommendations are adopted. The spawning season in which no fishing is allowed is the month of November. So that objection is taken from under him. The argument is gone. Now, you might as well try to pull yourself up to the second story with your boot straps as try to abolish gill net fishing. I think it is just about as impossible and about as unreasonable.

Mr. Amsden: Would it not be well to put some restrictions upon it.

Mr. Post: If you have your close season during the spawning season, that puts a restriction upon it. Let them fish with their gill nets wherever they can. They cannot fish in very shallow water. Their fishing on the reefs is not hindering reproduction. Of course, our brother's provision with reference to pound nets probably ought to be extended to gill nets. He says there is a wall of gill nets clear across Lake Erie, and I would not be surprised if he is pretty nearly correct. I know it is a pretty smart fish that gets up Lake Erie. I was a little amused at his statement as to the storms taking all his pound nets out. I have been turning the matter over in my own mind as to whether that did not account for our better catch of fish on the Detroit River this season. We have had a better catch this year than for many years before, and we flattered ourselves a little because we fished our nets ourselves and thought we did it a little better. I think that storm that knocked out their pound nets let a few of the fish through. I think it goes a good ways towards explaining the better catch in the Detroit River.

Mr. Wilmot: If you take the gist of the argument of the gentleman, you will find it to be this: that the pound nets could be set within four miles of the shore but the depth of water is not generally so great there, and consequently, if you limit the gill nets to the distance which the water would indicate, beyond that the pound nets fisheries would have the exclusive monopoly of the fishing, and I think that is what the gentleman was aiming at.

Dr. Parker: I move the consideration of this subject be indefinitely postponed.

Mr. Andrus: I second the motion.

Carried.

Mr. Hampton: There is one thing, gentlemen, that I think you have not expressed any opinion upon, and I believe it might be well to express an opinion, simply for the effect it would have

upon our legislatures. I see from a cursory examination of the New York law that they seize nets there that are illegally used. It seems to me to be well to adopt a resolution to the effect that the laws should permit and authorize the seizure of nets illegally used. We have no such law in Michigan, and I can say from experience we were very much hampered in the enforcement of the law. Carrying out this idea I will offer the following resolution:

Resolved, That the law should authorize the seizure and destruction of nets used in violation of law.

Dr. Parker: I will second that resolution.

Mr. Hampton: I have found this in this state: We have sometimes seized the nets; the man is convicted, and pays the penalty, or the Justice sometimes suspends the penalty. He takes his net and goes on the same as before, only he will be a little more careful. I have construed the law—not being a lawyer I could do so—to mean that they were contraband goods, and I have seized them, but they came with a writ of replevin and I was obliged to give them up.

Mr. Wilmot: The system pursued in Canada is substantially this: For a long period of time the nets were seized and sold. We found that such an absurdity that we came to the conclusion that the better plan was to destroy the net at once. And now, as soon as the officer seizes the nets, he burns them. There should be a limit to the length of any net used in a boat. Some persons are in the habit of using three or four kinds of nets, and they are left out in a storm, and consequently thousands of fish are destroyed.

Mr. Hampton's resolution was unanimously adopted.

Mr. Wilmot: I have been looking at these little fish and admiring them. You have designated in your motion that the fish shall be sixteen inches long. Now query: How will you measure that fish to get rid of a dispute in case of a conviction?

Chairman: From nose to tail.

Mr. Wilmot: But what part of the tail? I should say from the tip of the nose to the center of the tail. There is sometimes an inch difference between the tip of the tail and the center of the tail, taking the extreme limits. I would suggest that the measurement should be from the tip of the nose to the center of the tail, or the tail fin. A dispute might arise as to length of the tail.

No action was taken on the point suggested by Mr. Wilmot.

Mr. Wilmot: Before we adjourn I would beg to tender to this conference the thanks of the commission of Canada who have attended for the courtesies extended to them. We feel deeply gratified that we should be permitted to come here by the kind invitation you sent, and we now wish to tender our thanks for the courtesy that has been extended to us.

Chairman Bowman: The Secretary and stenographer will make note of what has been said. It has been very kind of you, indeed, gentlemen, to come here, and we desire to make you one of us as much as we can.

Mr. Harris: I can only add my thanks. I have been very happy in attending this meeting. I shall not forget my visit to Detroit for some time and I am very glad that you gentlemen have been pleased.

Secretary: I want to make a motion that it be the sense of this meeting that further meetings of this conference are desirable, leaving it open to be called whenever the spirit moves. That it shall be subject to the call of the Chairman at any time, whenever the necessity arises.

Dr. Sweeny: I will second that resolution.

Dr. Parker: How would it be to make it an annual affair, anyway?

Dr. Sweeny: It would be very pleasant to me personally.

Dr. Parker: The question is whether there are enough subjects to come up for discussion.

The Secretary: I think you will find that enough subjects will come up, and I think it would be well to embody it in the resolution.

(The resolution was unanimously adopted.)

Chairman Bowman: I would like to say before we separate on behalf of the American members of the conference that we are all delighted and very much pleased with you gentlemen from Canada, and there is a general feeling that we would like to get nearer together. Our interest in fish matters are in unison and it would not only be pleasant always to have you with us but I think it would do us both good. Certainly, we feel that we are receiving good from you hands.

The conference then adjourned sine die.